

# Andrews tells the Prince — get rid of Rod Hackney

RAYMOND Andrews has accused Rod Hackney of using the techniques of a second-hand car dealer in his election campaign for the RIBA presidency — and he has told the Prince of Wales to find a new architectural adviser.

Andrews said this week that Hackney's joint "dream ticket" approach with David Rock as

By Lee Mallett

his running-mate "is known as a 'switched sale' in the second-hand car business."

He maintains that Hackney has adopted the dream ticket tactic so that if he also wins the RIBA presidency it will "enable him to travel the world... whilst David Rock assumes some special vice-president role as a 'locum' minding the shop in his absence."

According to Andrews, "the membership do not want this; they have a right to see and know who is in charge and do not want to be fobbed off by proxy because the landlord is away". Andrews also dubbed Hackney's tactic "a transparent attempt to win votes because of Rock's popularity, even though Rock came third in the RIBA Council election for president after myself and Ray Cecil".

Andrews thinks Hackney will

be spreading himself a bit thin if he attempts to be president to both the RIBA and the RIBA. "You can't do both at the same time," said Andrews, "you must be able to give yourself wholeheartedly."

Rock, Hackney's running-mate, was unimpressed by Andrews' allegations. "The amount of time Rod Hackney will be spending abroad with the RIBA presidency is quite small and greatly exaggerated by Raymond Andrews," he said.

Rock estimates that the RIBA could perhaps involve 15-20 days travelling abroad in a year, and that at many of those events Hackney would also double as RIBA president.

"Raymond is really trying to make a point where there isn't one," said Rock.

He saw nothing unusual in the president devolving some of his functions to any of the RIBA's six vice-presidents, or to the one the president regards as his senior vice-president.

"I see it as natural," he told BD.

● The Prince of Wales should drop Rod Hackney, says Andrews. He said Hackney claimed to be his unofficial "architectural adviser". But someone with a wider knowledge and fuller understanding of the profession should be appointed. "Dr Hackney's narrow experience does not accord with

the Royal family's usual standards of taking broad advice." Andrews believed Jeremy Dixon or Bernard Hunt of Hunt Thompson would make better advisers, along with Bill Reed, Birmingham city architect and Colin Stansfield Smith, Hampshire county architect.

A Buckingham Palace spokesman would not reveal who advises Prince Charles but said: "He takes advice from a number of sources and those sources are confidential."

## Insall's latest award

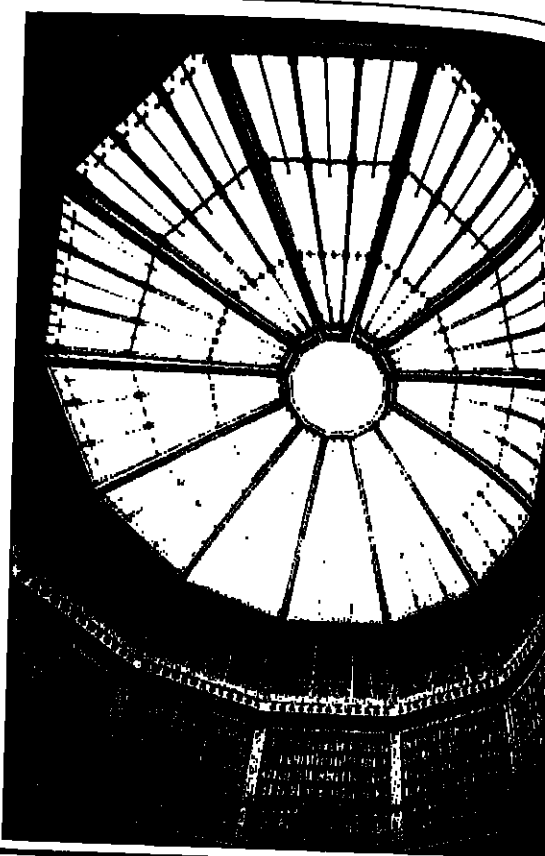
The repair and cleaning of the Public Record Office (library pictured) in Chancery Lane, London, has won the restoration category in the Worshipful Company of Stone Masons Awards, presented by the Duke of Gloucester on Wednesday.

Donald Insall & Associates were architects for the Property Services Agency.

The winner of the new-build category was the five-storey Friary Court offices in the City, designed by Chapman Taylor.

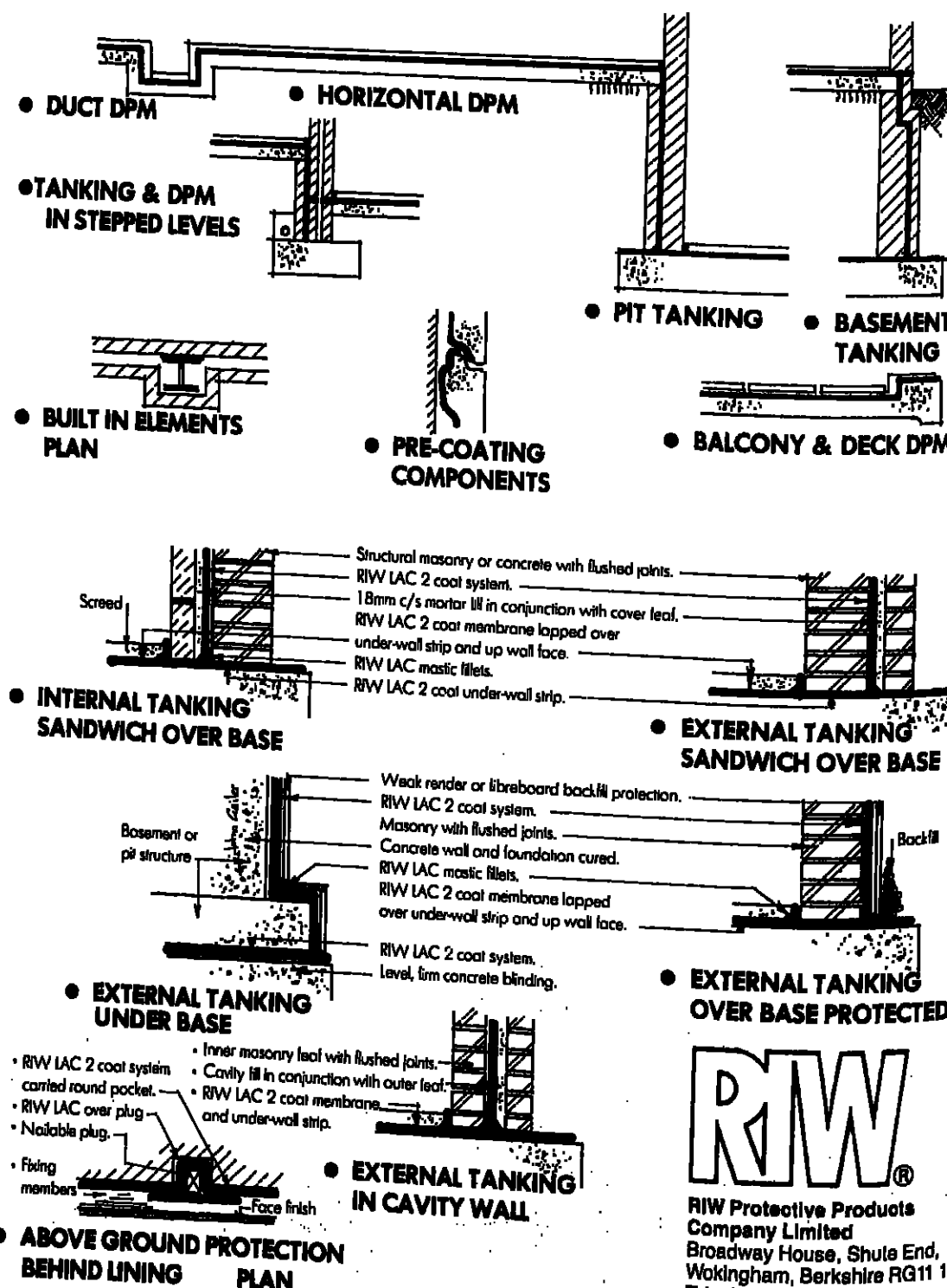
## New Oldham

OLDHAM council has approved a £50 million town centre development designed by Bernard Engle & Partners. It will have 27,000sq m of floorspace arranged around three glass covered sections. Work is scheduled to begin in 1988.



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# BUILDING DESIGN

No 812

The weekly newspaper for the design team

FRIDAY NOVEMBER 14 1986

## Gender record outrage

ARCUC registrar Kenneth Forster hit out at the activities of the RIBA women's group this week.

The group has been pressing for gender to be added to the Arcuc registration form because it wants to monitor the number of women entering the profession and the RIBA — but Arcuc has refused, saying it would imperil its exemption from the recent Data Protection Act.

At the RIBA Council meeting on Wednesday a motion proposed by Patricia Stewart called on RIBA representatives on Arcuc to seek this amendment to the form and its data bank.

Forster commented: "I'm amazed. Two years ago we had a box on the form for Mr, Mrs, Miss or Ms."

"But the women's group wanted it removed because they said clients discriminated against them, and made it clear I would be very unpopular if it was not."

## Institute comes in for criticism

THE RIBA came under attack on two fronts at this week's council meeting — from students and salaried architects.

Jake Brown, council member and co-author of the new Salaried Architects Groups' report *The housing issue*, accused the RIBA of having "no recognition" of the housing problem and "statistical evasion".

According to Brown, the RIBA's reaction to the spending increases for housing, announced in the Chancellor's recent autumn statement, gave "no idea of how the figures were going to relate to the total picture".

He said the SAG report drew attention to this problem and emphasised the need for "real data".

If the public were to come to the RIBA headquarters, he said, they would find no recognition of the situation, even though they can read about the housing crisis in London in the papers.

On the student front, a survey of every architecture school in the UK revealed that the relationship between the RIBA and the schools was "at rock bottom", it was claimed.

continued page 3

## Competition-winning Dane has had enough of French politics

# ARCHITECT QUILTS IN PARIS FIASCO

DANISH architect Otto von Spreckelsen this week abandoned work on the dramatic "Triumphal Arch of Mankind" in Paris, following conflicts with French politicians and designers.

Spreckelsen won the international competition for the project, which attracted almost 1,000 entries.

It was to comprise a new international communications centre plus accommodation for France's environment, planning and housing ministries.

After a jury including Richard Rogers had made recommendations, President François

By Paul Feldman

Mitterrand himself selected Spreckelsen's design — a cubic arch, 110m high, broad and long.

It is aligned with the historic Louvre axis, but shifted to acknowledge the Eiffel Tower.

Already the building is 20m off the ground, and building work is due to finish next year.

Mitterrand had weekly meetings with the architect, who is professor of architecture at the Royal Academy of Art in Copenhagen.

But the election of Conservative Jacques Chirac as prime minister resulted in a spending cutback on the project, and the idea of the communications centre was abandoned, despite Spreckelsen's protests.

Other disagreements emerged as the chief French architect collaborating on the project, Jean-Marie Chevalier, tried to implement a 10 per cent cost-cutting exercise.

Mitterrand stepped in on Spreckelsen's side, telling French designers to respect the Dane's designs.

But further problems arose when the Danish engineer, Erik Reitzel, spoke out strongly against the way the piles were driven. His specifications were apparently ignored.

Spreckelsen has returned to Copenhagen following a minor operation in a French hospital,

and is making no comment. The French want him to return to the project, but this looks unlikely.

Spreckelsen's victory in the competition was a surprise, since he had only designed two churches in Denmark.

The cube at La Défense became his life's work, and he believes that a political decision has been taken to convert what was an exciting project into an ordinary government building.

Ironically, the brief and organisation of the competition were much praised, and described by Richard Rogers as outstanding.

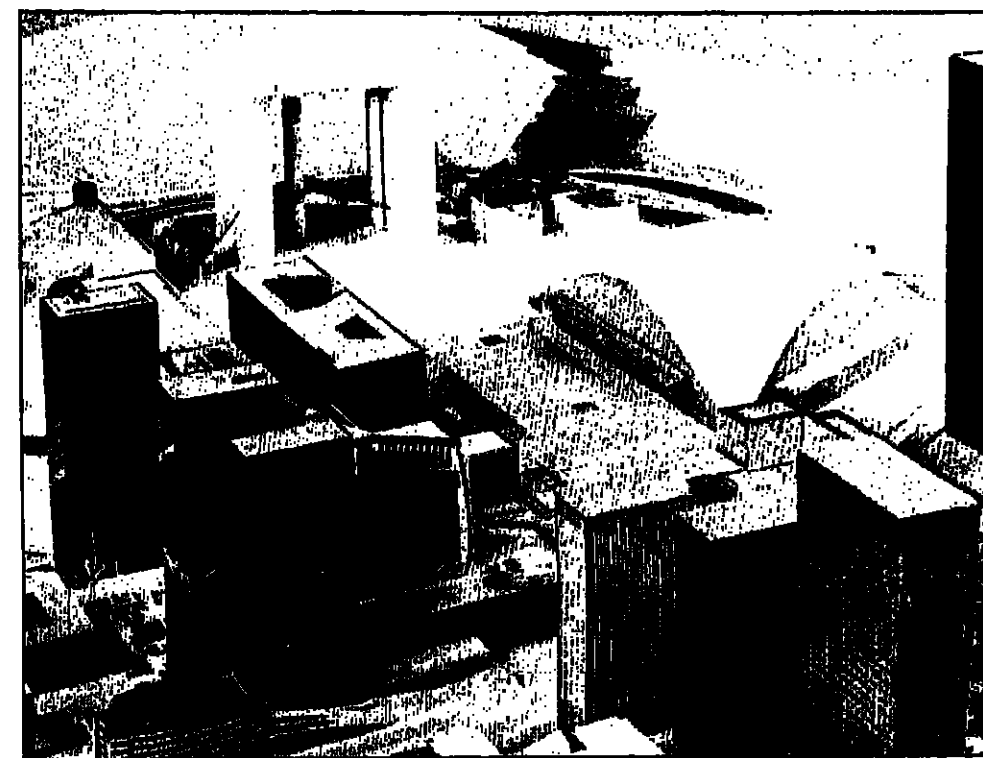
A detailed consent was granted on the site in the 1970s when Wimpey and Trafalgar House were competing to develop it.

According to Pearce, work will start on the site in February when the bank takes possession. BDP will be aiming to get a detailed planning consent by then if possible.

Richard Saxon is handling the scheme for BDP and the firm are currently producing a detailed study of the school site and possible solutions for Morgan Guaranty.

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Above: The cube design Spreckelsen is leaving behind — unceremoniously like the way Jørn Utzon, another Dane, quit his Sydney Opera House project in 1966.

## Riverside design runs into City planning objections

WHINNEY Mackay-Lewis' design for a scheme to replace Vintry House on the north bank of the Thames next to Southwark Bridge (BD July 11) has been referred back to the officers by the City's planning committee.

Apparently the committee did not like the scheme overhanging the river.

Also the Port of London Authority had objected to a building projecting into the river.

It refused to grant developer Wates City of London Properties a licence for the proposed projection.

The scheme incorporated features encouraged by the City — for example it improves sight lines to St Paul's.

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## Drawings favourite

FAVOURITE to be appointed as new curator for the RIBA Drawings Collection is Dr Thomas Cooke, an architectural historian specialising in churches. He works as an investigator for the Royal Commission on Historical Monuments and is an associate fellow of Pembroke College, Cambridge.

## District nursing



pages 24-29

## Maintenance in need of shake-up

COUNCILS could save up to £700 million a year if they managed maintenance programmes of their 4.8 million homes better.

This is the conclusion of the Audit Commission, which monitors local authority spending and performance.

The commission, in a wide-ranging report, claims that: ● too much work is done on a jobbing basis, which costs up to 50 per cent more than the same work carried out as part of a

planned programme; ● emergency work accounts for up to 30 per cent of total maintenance expenditure in some areas, when it should at most amount to 5 per cent of all jobbing repairs; ● abortive calls on jobbing repairs can account for more than 20 per cent of all calls;

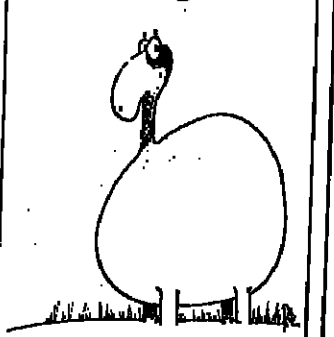
● many authorities do not secure effective competition for repair work, even though tender prices can be in the ratio of 2 to 1; ● redecoration and repair of homes left vacant can cost up to £1,000 per re-let — even though tenants are responsible for maintaining houses in good decorative order.

The commission proposes a three-stage plan to bring the maintenance problem, which could cost up to £20 billion to put right, under control.

First it wants a planned inspection of assessment of maintenance needs in all dwellings; secondly the start of managed maintenance on the basis of the existing best practices; and thirdly the seeking of new sources of finance to pay for the necessary work.

The report, *Managing the crisis in council housing*, is published by HMSO price £5.95.

## ...signing off...



THE CMLISK

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## Rostrum

COLIN Amery's lecture on "Approaches to the New Museum" was an absorbing verbal equivalent of his subject, the museum as an encapsulation of architectural history.

With a wide and original selection of examples, Amery showed how museums have reflected the changing course of architectural theory and design since they emerged from the private palaces of the Renaissance and went public in the 18th century.

Apart from being built mainly in Germany, these first public museums prefigured contemporary equivalents in being cultural centres — in the true sense of the Greek word for museum — comprising libraries as well as collections of painting and sculpture.

But unlike Schinkel's Altes Museum in Berlin, which used the building as an architectural history lesson about the classical orders, Stirling's Staatsgalerie is "a parable about modern art" suggests Amery, with staircases that go nowhere among its analogies. It does go back to the museum as teaching tool by exploding Schinkel and opening it up to the world in a modern way to explain art and tradition, though the uninitiated visitor might think the Weissenhof-style back was simply buddish modern architecture.

Stirling's new Tate extension is about the history of modern architecture, Amery believes. It has references to Boullée and Lutyens among others and he was pleased to note that Stirling has calmed down with his "technological jokes and frightful colour schemes", as well as realising that buildings must have more than one layer of meaning. In the exterior of the Fogg Museum in Harvard, Amery thought Stirling had been less successful, though the inside was "wonderful".

The Tate extension is a rare departure from the "awkward British tradition of converting old buildings" which placed the pre-Smithsonian Museum in Montague House in 1820. While Munich and Berlin were using high cultural language — a porticoed hybrid of ancient Greece, Imperial Rome and Renaissance Italy that spells instant boredom — to build their architectural museums, things were more relaxed in England, explained Amery.

When our national art collections emerged from their country houses to be united with the

Colin Amery talked about museums at the Royal Academy. Jan Burney bought a ticket.

## Fighting museum fatigue



Amery — favourable comparisons.

artistic loot from the Napoleonic wars they were not displayed in "horribly didactic" monuments, but in little practical complexes like Soane's Dulwich group which also included six almshouses.

Amery drew attention to the incomparable, changing light of Soane's picture gallery — still the shrine to which all architects trek when they have won the commission for a new gallery project. Light is also the most important quality of the Kimbell Museum in Fort Worth, built by the "poet of American architecture", Louis Kahn. Kahn repeated his skill and understanding in 1977 at Yale's Mellon Centre, the storehouse of all the best British art that American collectors have managed to export. Here too, Kahn succeeded in persuading curators to overcome their customary terror of light and created, appropriately, a setting reminiscent of an austere English country house or a Renaissance palazzo.

In his museum at München-

Gladbach in 1982, Hans Hollein, Amery thought, had been less skilled in lighting objects than in displaying them. The sculptural beauty of this building is apparently marred for many visitors by the blinding headaches with which they emerge. A contrast to the Burrell Museum in Glasgow, where everyone looks happy, though the building is "untouched by architectural developments since the 1960s", without impairment to its pleasing environment.

Amery looked at other British examples built since the South Kensington museum explosion that followed the Great Exhibition of 1851. Recent examples included Powell & Moya's Museum of London, considerably more successful inside than out, which contains "the best shops in the Barbican" in its reconstruction of an 18th century street. But the real museum explosion, said Amery had been in the USA and it continues to the extent that "museum fatigue" has now become a widespread, serious disease.

Private patronage and "intelligent tax laws" have encouraged wealthy American collectors to donate generously to the nation and all serious cities in the US consider it essential to possess their own museums. When the National Gallery of Washington was built in 1941, Beaux Arts classicism was still considered the only appropriate museum style.

Amery surveyed the newest international museums from Richard Rogers' "first exposing of his intestines" at the Pompidou Centre to Richard Meier's High Museum at Atlanta, a cut-out building best for displaying Japanese kites, and I M Pei's marble hall in Washington built in the "airport/aesthetics" and very good for parties. He described the new chain of museums in Frankfurt a second asset to complement its exquisitely designed financial newspaper — and concluded with a glance at the unsuccessful projects on the National Gallery extension shortlist.

Even if Piers Gough's design for the gallery extension could just as easily have been for the Odeon at Neasden, Amery was happy to point out the favourable comparison of all these schemes with the museum buildings of Brasilia and the Hayward Gallery. The liveliness of his lecture and its content had inspired confidence that they were indeed anachronistic remnants of a tradition that was now dead.

## City visions

Fred Roche spoke about building cities at the Royal Academy last week. We present edited extracts from his talk.

ARCHITECTS and urban designers have a major role to play in initiating and providing for the vision of the city which reflects our aspirations, our dreams, our yearnings to live and work in convenient, stimulating and beautiful environments.

To achieve this we need to build a new partnership between the design professions and the communities they serve. It is no good waiting for others to take the lead in creating our vision of the city.

The vision will inevitably be multi-faceted, I suggest the

first characteristic is that it should be "a plan which says yes". In that sense alone it will be very different from most plans. The second characteristic is that the vision will express the quality of the environment to which the community aspires. Above all not only should the vision be realistic it must be exciting. Its purpose will be to stimulate politicians, individuals, community organisations, private developers and investors to believe that the city could be made into a better place for people.

In some communities in Britain — Glasgow, Edinburgh and Huddersfield, to name three that I know personally — the business community is taking the lead to work closely with locally elected members and officers to plan for the future of their city.

In the USA, joint efforts by the business community and local government are common — here they are all too rare. I am in no doubt that municipal leadership grounded both in the public and private sectors is a fundamental prerequisite to any effort to bring our cities back to life. In many British cities, the gulf between local government and the local business community is far too wide.

All party leadership is necessary — private investors cannot be expected to invest, or reinvest in a community's assets if the community as a whole is not working together. I have no reservation in suggesting that those communities where local politicians bicker over minor planning matters and other services, virtually ignoring the future of the community, do not deserve major investment from central government or the private sector.

We must establish effective machinery for regional planning: for the reasons I have already given, our cities cannot be viewed in isolation from their regions. The last regional plan

linked to the re-  
Nations "year" —  
day would be devoted  
ecture and peace".

Because information  
proposed day was  
communicated to Portland  
June, nothing was done.

Next year, the  
council wryly anticipated  
will probably again be  
architecture day. But  
is so close to the  
held in Brighton, "that  
that no action be taken  
occasion".

## Architecture day that never was

ATTEMPTS by the International Union of Architects to establish a "world day of architecture" look like failing, at least in the UK, for the third time in succession.

A report to RIBA Council this week notes that the initiative, launched by current union president Georgi Stoilov in January 1985, left too little time for any action to be taken by the institute that year. The proposed day was July 1.

This year, the UIA council decided in April that that day should again be July 1, and he

## Pitching a new prize

REDLAND have launched a pitched roof awards scheme to recognise achievements in design, good workmanship, and encourage pitched roofing developments.

A cash prize of £200  
the winning architect  
entries are invited in  
categories, housing, etc.  
The winner of each will  
£1,000.

## Camden appointment

CAMDEN council has appointed Hunt Thompson and the London Research Centre — the former GLC's housing research unit — as consultants for the Hillview Estate in Kings Cross, London.

The consultation com-  
determine whether the  
should be refurbished  
molished, to make way  
build.  
Hunt Thompson was  
ally hired by Hillview

## Marriage proposal under fire

THE RIBA is offering to subsidise sexual relationships with its latest plans to reduce annual subscription rates for husbands and wives, according to SAG member Jake Brown.

And he claims the Institute could be in violation of the Sex Discrimination Act if it does not offer the same deal to gay men or women living together.

Where a husband and wife are both members, either one may claim a reduction in the rate of the RIBA annual subscription.

Such a reduction would be 75 per cent of the lesser subscription payable by either for the year.

The main saving for the Institute is that it then need only send out one copy of *The Architect* each month.

Bob Gilles said the discount plan was sexist and not worthy of the Institute. "The Institute should not get involved in the domestic affairs of its members," he said. An amendment to dismiss the rate was defeated by 19 votes to 17.

THE Housing & Planning Act, 1986, which provides for the establishment of simplified planning zones, received Royal assent last week.

The planning provisions, which cover Scotland as well as England and Wales, include new controls over hazardous substances and direct government assistance for urban regeneration.

There are also a number of detailed amendments to legislation on town and country planning and listed buildings, designed to simplify the law and improve the efficiency of the planning system.

The Act makes it unlawful to practice racial discrimination in planning.

It also includes a number of changes to housing legislation. Public sector landlords are given new powers to submit

BD reports on this week's RIBA Council

## Spending decisions push up subscriptions £10

THE regions, community architecture, maintenance at Portland Place and the president's office account for the main increases in this year's RIBA budget.

By Alan Thompson

And members are facing a 10 per cent increase in subscriptions — giving a top rate of £132 — to pay for it.

Policy committee's annual conference identified four areas which deserved special attention. These were architectural education, broadening the base of the institute and developing it as an architecture centre, community architecture and the development of a new marketing strategy.

Next year's budget, estimated at over £4 million, includes some significant increases.

The regions are to receive £31,000 to implement the sec-

ond half of the Onslow report and to meet rent increases, the amount of subscription income returned to Scotland will increase by £18,500, Ulster community architecture is to

expenses of members of British Standards Committees, £2,500 has been allowed for the International Students Competition and £2,300 for the president's medal scheme.

In most cases bids were reduced from their original level and administrative costs in every department were cut.

It was also agreed that the improvements to office technology and the contributions the RIBA makes towards South African schools required further research before funds could be allocated.

Departmental budgets showed an initial shortfall of approximately £650,000 and the policy

committee decided priorities within the strategic plan and allocated available resources.

A small proportion of the accumulated fund is to be used to meet the extra expenditure created by hosting the UIA congress in 1987.

One casualty of the cuts was the contingency reserve which has been merely maintained, for the second year running, at £50,000.

Rather than reducing the reserve still further, the institute's commercial companies have been set "realistic" targets to replace their conservative forecasts.

## Quiet vote on money

THIS year's budget met little opposition and was finally passed by 38 votes for and only 1 against with 2 abstentions.

Council overwhelmingly approved a motion from John Onslow that £8,500 should be taken from the contingency fund to fund the Membership Assembly.

Variable subscriptions, the relationship between the Institute and students, and the future funding for the nuclear working party were discussed but there was little serious opposition to this year's proposals.

## Criticism

The institute was accused of being "an out-of-date club that has no relevance to themselves in the schools". Student representative Mark Orne said the RIBA must prove it is worth joining before membership can increase.

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## Attending the academy

THE Royal Academy's exhibition "New architecture: Foster, Rogers, Stirling" is attracting great interest.

The average daily attendance is 1,344 visitors, including a large number of young people. BD is still interested in readers' 200-word reviews of the exhibition.

## Dishing out guidelines

GUIDELINES to control the visual impact of modern telecommunications equipment are proposed by the DoE in a draft development control policy.

It pays particular attention to developments by cable television companies, cellular radio operators and the installation of satellite television antennae. The DoE wants local authorities, telecommunications operators and environmental groups to comment on the proposals by January 16.

## PSA policy on quality

PROPERTY Services Agency policy on quality assurance is explained in a new booklet.

The PSA now requires quality-assured products and services in its contracts and is extending this to design and construction processes. The booklet is available from the PSA, Whitgift Centre in Croydon.

## Colorcoat awards

DECEMBER 1 is the closing date for entries in this year's Colorcoat Building Awards.

Any building built or restored between July 1983 and June 1986 using Colorcoat pre-painted steel is eligible for the competition with a first prize of £1,000.

Details from BSC Colorcoat Building Awards Administrator, Sales Promotion Department, PO Box 10, Newport, Gwent NP9 0XN. Tel: (0633) 272281.





## Chapman Taylor for Bromley facelift

BROMLEY council has confirmed that Chapman Taylor & Partners will be carrying out the £50 million redevelopment of Bromley town centre.

The policy and resources committee said that the scheme, backed by developer Capital & Counties, would "rank among the best of its type in the country and provide a successful and much-needed addition to the prime shopping area and leisure facilities of Bromley".

Chapman Taylor beat three other schemes by Leslie Jones, T P Bennett and Building Design Partnership with a 35,000sq m retail and offices development.

The 3.6ha development site lies in the heart of Bromley's main shopping area and immediately to the east of the High Street.

Most of the site is already owned by the council.

Chapman Taylor's scheme includes two department stores, totalling 11,000sq m, 70 retail units, a 5,000sq m extension to Marks & Spencer's and a leisure centre.

Queens Garden is to be extended and enlarged to form an integral part of the new shopping centre.

The scheme will also provide 1,450 car parking spaces.

The scheme also envisages the relocation of the Methodist Church and United Reformed Church as well as providing 20 housing units.

## Leading building firm to float on exchange

ONE of Britain's largest building components suppliers, the Yorkshire-based Ward Group, is to obtain a full Stock Exchange listing on November 19.

Ward is probably the market leader in the manufacture of steel roof purlins, having an estimated 30 per cent of the market — together with 20 per cent of the cladding (as opposed to curtain walling) market.

It has subsidiary operations in France and Germany, and a venture with Schuco, the

German curtain wall firm. Twenty five per cent of the company is to be sold through a private placing of shares in order to raise around £2 million.

The 70-year-old Ward brothers, Frank and Wilf, who founded the company in Sherburn, North Yorkshire in 1949, will be selling 3.5 million shares while 2 million new shares will be issued.

This will leave 10 per cent with employees and a further 65 per cent with the family.

## Share issue

REGALIAN Properties, the tower block refurbishment specialist is hoping to raise £35 million with its second share issue in 12 months.

The rights issue will help finance the company's increased level of activity.

## Show is off

THE exhibition of competing designs for schemes to house the Thyssen Collection in Lugano — won by James Stirling, Michael Wilford and Associates has been postponed.

## Conference tickets going

THERE are a limited number of sponsored tickets still available for the community architecture-based "Building Communities" conference on November 27 and 28.

The normal price for the two-day event which will be addressed by the Prince of Wales, Lord Scarman, Michael Heseltine, and Rod Hackney, is £90 but a special concession is available to students, voluntary organisations and others who cannot afford a full ticket. Further information on sponsored tickets is available from Jane Ahern, 15 Bindon Close, Lutworth, Wareham Dorset BH20 5PX.

Work has started on the Daily Mail's new printing works in Surrey Docks, south of the Thames in London's Docklands following the granting of full planning consent for Watkins Gray's design.

The architects have already completed two buildings for the Daily Telegraph in Manchester and the Isle of Dogs, and estimate that this latest plant, totalling 24,500sq m and costing £25 million, will be ready for press installation in 16 months, with completion due 8 months later.

The Daily Mail, The Mail on Sunday and the London Standard will be printed at the plant in late 1988.

TENANTS are launching an appeal to buy the lease on the 1823 Diorama building in Regents Park — and convert it into a community-based arts and entertainment centre.

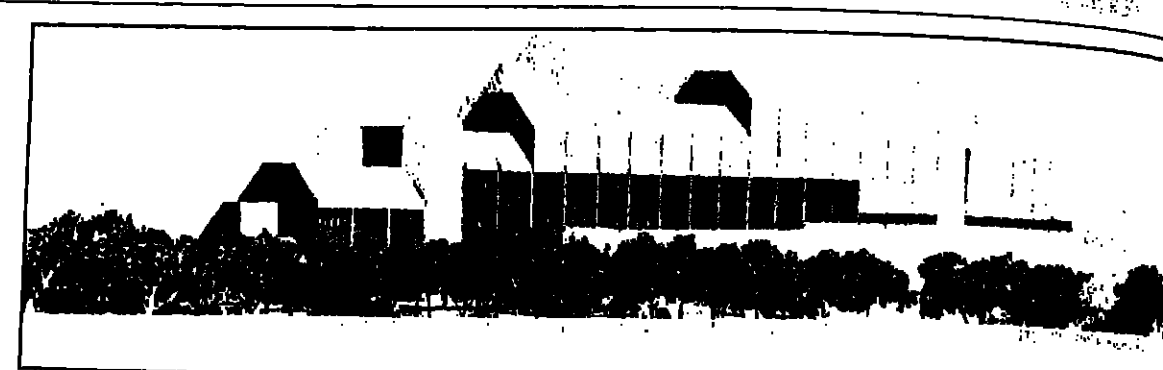
Negotiations opened this week between landlords for the site, the Crown Commissioners and the board of trustees for the tenant group, Diorama Arts,

which includes Sir Denis Lasdun, Sir Roy Shaw and Lord Beaumont.

They are hoping to persuade the commissioners to part with a 125-year lease for the site for up to £1 million. The appeal is for £3.5 million.

This would mean an end to the commissioners' controversial plans to convert the Grade II listed building into housing and exhibition space designed by Hunter & Partners.

Camden council was given the final say over the two rival



## Diorama tenants bid for lease and arts conversion

schemes from Diorama Arts and the Crown Commissioners after the Government approved both schemes for the site earlier this year.

The council came down firmly in favour of Diorama Arts and architect Alan Phillips' scheme to upgrade the building for use as an arts and entertainment facility.

The Crown Commissioners face a long and probably expensive appeal against Camden's decision and sale of the lease could be an easy way out.

The Alan Phillips scheme, which could cost up to £2.5 million, would ensure the Diorama's existence for future public use, add to the surrounding buildings and retain all the elements of historic interest within the building.

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## Fire costs rocket

THE cost of fire insurance was an estimated £125 million between July and September 1986, a 38 per cent increase on the same quarter in 1985.

The total for the 16 months of 1986 was £1.6 billion, compared with £1.1 billion for the same period in 1985.

## Workload forecast

CIVIL engineering workload is steady but the outlook is gloomy, according to the latest survey from the Federation of Civil Engineering Contractors.

Although there are indications of marginal improvements compared with 12 months ago, the position is not so good compared with six months ago.

The proportion of firms without any civil engineering work on their books stands at nine per cent.

## Cool reception for Kent new town

YET another proposal for a 170ha new town on green belt land in Kent has been unveiled — by Trafalgar House's housebuilding subsidiary, Ideal Developments.

Ideal's proposals come in the wake of Prince Charles' recent disapproval of developers' penchant for greenfield sites over those in the inner city.

Its scheme also received a frosty reception from the local planning authority, Tonbridge and Malling district council.

Ideal wants to develop a £150 million scheme at Leybourne Park, on a site adjacent to junction four of the M20, three miles from Maidstone, bounded by the A228 and A20.

The site includes the Leybourne Grange Hospital controlled by the South-East Thames Regional Health Authority.

The scheme provides a massive 74,322sq m shopping park, tennis centre, gymnasium and fitness centre, discotheque, swimming pool, bowling rink, 200-bed hotel complex and conference centre and a 9,290sq m business park.

The shopping park would include parking for 5,000 cars, a 13,500sq m department store, a 5,400sq m superstore, a similar

amount of specialty shopping within a "climate-controlled" mall, and a market hall.

The residential content of the scheme would cover 59ha and include around 1,750 homes.

Ideal claims that 2,500 jobs would be created during its construction and 2,000 more permanent jobs would result from

the development. A spokesman for Ideal admitted that the scheme was outside Kent's structure plan which is currently under review.

He also said that Ideal had identified demand for both the housing and commercial elements of the scheme, and considered that current Kent planning

policies did not cater for that demand.

Planning permission has been granted for another new town just north of Bristol at the interchange of the M4 and M5 motorways.

Ideal Homes, CH Beazer, Tarmac, Westbury Homes and a host of other housebuilders are to build 8,500 homes for 25,000 people.

Northavon district council and Avon county council are also involved in the scheme.

## Schreiber house fight runs on

THE future of James Gowan's much praised, and criticised, Schreiber house was still uncertain this week, with architects Paskin Associates preparing to appeal against Camden council's refusal of demolition consent.

The council is trying to thwart plans by Gable House Properties to demolish the 1964 dwelling and build three blocks of 24 flats on the site.

No one has come forward to buy the £1.8 million stylised and personalised four-storey house following the death of furniture magnate Chaim Schreiber. Surviving family members see the demolition and rebuilding plan as the only way forward.

The building is in the Red-dington/Frogna conservation area, which was designated in 1985, and needs council permission for demolition.

But Camden has stated its opposition to the loss of such an important architectural feature.

Paskin Associates will be asking environment secretary Nicholas Ridley to decide the

matter. They say they are confident of a favourable decision because the building is not listed — but Camden is asking for listing to take place.

Project architect Charles Sands told BD the normal procedure to protect the building at this stage, would be to apply to get the house officially listed by the DoE.

But at only 22 years old, the Schreiber house would not normally qualify.

So far there has only been one post-1939 building listed — the Brynmawr rubber factory in South Wales. Cadw, the Welsh architectural watchdog group, campaigned successfully to get the factory listed seven months ago.

Camden council is hoping that Ridley will allow a similar listing in the case of the Schreiber house.

Gowan's brick and glass house, his first project after the dissolution of his partnership with James Stirling, has been described as more suitable for local housing than a residence for a successful furniture manufacturer.

And some critics say that the brutalist design does not fit in with the Victorian dwellings beside it on the edge of Hampstead Heath.

But the house has also been praised for these elements, particularly its lack of compromise in design, its situation, layout and high quality detailing.



Pending off demolition — James Gowan's Schreiber house.

## Stone specification goes down the pan

AN administrative blunder by a county officer has led to toilets at the Church of England school in Ducklington, Oxon, being built in the wrong kind of stone. And as a result of parish council

protests the partly-completed toilets will have to be demolished and built again.

At an urgent meeting last week three county council officers argued that the work should be continued. But West Oxfordshire district council supported Ducklington parish council in insisting that the correct stone should be used.

The district council argued that the school was due to be considered to be made a listed building and the artificial stone being used would make the toilets differ from the surrounding buildings.

The meeting heard that planning permission for the toilets had been given by the district council on condition they were made of natural stone.

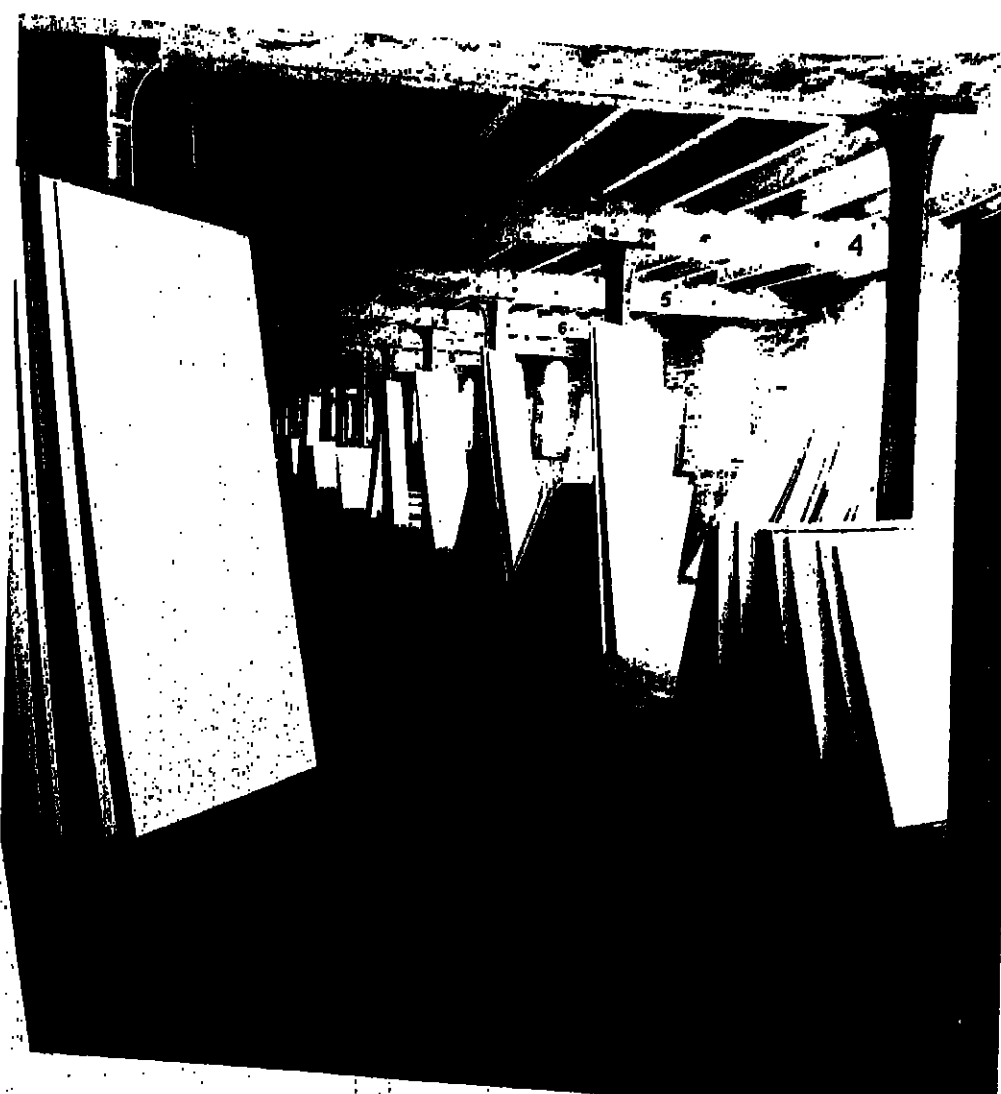
The mistake was spotted by Ducklington parish council when the walls were 1m high.

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Two Danish developers, the K&S Group and Christani & Nielsen are planning this £25 million housing scheme at Greenland Dock in the Surrey Docks south of the Thames in Docklands.

Designed by Danish architects, Kjaer & Niche, the scheme covers a 1.3ha site on either side of the entrance to Greenland Dock.

Flats, maisonettes and family homes are planned to echo the classical architecture of 19th century London so squares, circles and terraces are included in the design.

Called Greenland Passage, the development will consist of three- to five-storey buildings around a central courtyard on each side of the dock entrance. At the northern side of the development a small street is formed by a row of four-storey houses and flats, culminating in a small tower overlooking the river.

The river serves as the focal point for the scheme and the frontage becomes an extensive landscaped public plaza overlooked by the two curved terraces, one convex the other concave, of the central buildings.

## Surrey plan published

DETAILS of the public examination of Surrey County Council's alterations to the Surrey structure plan have been published by the council.

Interested parties have until December 2 to object to the issues or participants selected. Issues to be discussed include the future of the green belt and the countryside and future provision for housing.

The examination opens at the Marlborough Hall, Dorking, Reigate Road, Dorking on February 3, 1987.

# Suspended architects vie for Lambeth directorship

LAMBETH council's two most senior architects — both suspended on full pay by the local authority — have applied for its vacant director of development post.

Herb Meyer, a practice manager, was suspended on July

17, 1985 and is still waiting to be informed of the charges against him. Mark Drummond, a principal architect, was suspended earlier this year.

An internal inquiry into Drummond's case at the beginning of October dismissed seven charges against him, but recom-

mended he should be sacked for talking to the press. He has not been formally notified of the decision.

He was surprised to learn that BD had been sent a copy of his application but he said it was serious and he expected to be called for an interview.

Since the departure of a large number of architects from the council he is the second most senior, has worked for it for 11 years, and last year handled a third of its completed projects.

He named John George, the chief executive of the council as one of his referees. Normally, he said, he would have named Meyer because he was his immediate boss, but as he had been suspended and his boss James Campbell had left the council, George was the logical choice.

Friction between Drummond and some members of the council developed after Meyer

By John Wood

was suspended for alleged mismanagement. Drummond was suspended after he spoke to national papers about the case and criticised the council.

In June another member of the architects' department, Nigel Conner Ed Hall, was bound over for £500 for threatening Drummond and had a subsequent appeal rejected.

Meyer refused to comment on his job application except to say it was serious.

He has now been waiting almost 16 months to hear what the disciplinary charges against him are.

## Local sports guidance

THE Sports Council has published two design guides for local sports centres.

They appear under the Sports Council's "Standardisation approach to sports halls" (SASH) initiative.

Indoor dry sports building and swimming pool option are available from the Sports Council Publications Unit, 16 Woburn Place, London WC1 at £20.

## Building Regs seminar

A SEMINAR on Building Regulations organised by the British Institute of Architectural Technicians will be held at the Clifton Hotel, Luton on November 26 at 7.30pm.

The speaker is Douglas Harrison, of the Institute of Building Control Officers.

ISLINGTON council's architectural department is to hire 10 professionals and the proposed increase would make it one of the largest architectural offices in the country. It has doubled in size in the last seven months.

Islington's architectural department incorporates all the professional and technical staff of the council's architectural department.

## Religious conversion for the retired

A £1 MILLION conversion of a Bristol church by Design Build will provide retirement homes for the Bristol Housing Association.

The company is converting a 604sq m four-storey block on an adjacent Clifton Down, later church by an architect.

The former United Church has been empty for some time and was falling into disrepair. The conversion, retaining three of the original facades, with a new structure behind to date the flats. The new building is in its original existing state.

Managing director of Mike Duckering said: "We wanted to save the fabric of the church, a very important landmark, while bringing the building into use."

## Sussex winners announce

THE winners of a conservation award to highlight conservation work in Sussex were announced by Sussex County Council.

Five awards and three commendations were made. The award for conservation went to David Russell, of the Sussex Wildlife Society, for his work on St. Edmund's Church, designed by Nicholas in 1875.

Architects Richard P. and Walter Greenway were awarded for the conversion of an early Victorian watermill into a private house at Biggles.

Awards were also given to Nicholas Rowe Associates for an extension to a 19th-century timber-framed building at the D. Edward King House and Neil Holland for buildings in a historic area.

The judges said they were impressed with the enthusiasm of the owners, designers and builders involved.

## Errata

● The scheme illustration on page 11 of our brick supplement was drawn by David Crease & Partners for York Housing Association, and not as stated.

● In the same supplement two pictures at the foot of page 19 were transposed. Our apologies for any embarrassment caused.

● Architects for Michael's offices, including the lighters (BD, October 20) Troughton McAslan.

## Islington hires more

ISLINGTON council's architectural department is to hire 10 professionals and the proposed increase would make it one of the largest architectural offices in the country. It has doubled in size in the last seven months.

Islington's architectural department incorporates all the professional and technical staff of the council's architectural department.

## Infill



## Atwell at large

## Prince's shot off target

WITH exquisite timing the Prince of Wales has intervened again in the great inner city debate at a convenient moment in advance of his keynote speech at the Building Communities Conference later this month.

Whether the venue of an NHBC conference was appropriate, or whether he chose the right target in lambasting the volume housebuilders is more debatable. Or perhaps it was a coded message to government?

In condemning housebuilders for wantonly using up scarce greenfield sites he strikes popular chords that few would wish to argue with, but his corollary, to quote his NHBC address, is that "greenfield sites, from an overall national economic point of view, are far more costly to develop than derelict sites, although on the face of things they may appear to be cheaper".

The origins of the downward spiral of decay in several of our major inner cities goes back to the aftermath of bombing in the last war. In most of them it was the actions of successive governments in the 1950s and 60s in promoting the new and expanded towns policies that denuded our inner cities of population and commerce. If people and industry are to be encouraged back it can only be by means of special fiscal incentives.

Before blaming the housebuilders for anything, we must acknowledge that they are responding to market forces in wanting to build in the countryside. One should look to government for an absolutely firm line in holding to the green belt and resisting any incursions, whether for residential or industrial purposes, and to treat increases in leisure provision with extreme caution.

At the same time people have a right to live in the country if they choose. There are plenty of greenfield sites, accessible to our cities and away from top grade agricultural land, that could take housing, as well as limited expansion to satellite or dormitory towns. Families with children and cars want to live in the country. No government's policies should force them into the inner city through shortage of housing on greenfield sites.

Young and old people often favour the inner city for its communications and access to social life; families too, especially first-time buyers before they ascend the upwardly mobile ladder of buying and selling property that slowly but surely leads them outwards into the commuter belt. But it must always be remembered, even by the Prince of Wales, that it will inevitably be more expensive to build in the inner city.

Foundation problems, and services and access arrangements, frequently push costs up to a level where such development is a severe disincentive to any housebuilder. The only way to encourage them is for government to offer the financial advantage.

There is a great deal of nonsense talked nowadays about the need to refurbish old industrial buildings and warehouses in inner city areas for housing. It can be demonstrated in many cases that it would be cheaper to pull them down and rebuild with new homes. Regrettably, as many developers and local authorities have discovered, that would remove the possibility of government grants. The result is that a variety of intrinsically ugly and unsuitable buildings are being expensively converted into the sort of units that only the wealthiest can afford.

What worries me most about current trends in our cities both from government, and to some extent echoed by the Prince of Wales in applauding private self-help enterprise, is the possibility of privatisation. London Docklands is a splendid example of how an urban development corporation can work, but its geographic situation offers unique advantages. Merseyside is less successful for obvious reasons; would entrepreneurs invest in Hull if one was set up there?

More UDCs could and should be created, provided they are given greater powers of implementation, and are not simply imposed as another layer of bureaucracy on top of what the Government see as recalcitrant local authorities. What on earth is the point in Nicholas Ridley announcing four new UDCs in rate-capped areas where the effect is to take the money away from the local authorities with one hand and give it back with the other to a new quango? Can anything other than hostility and privatisation result?

Unlike many involved with the construction industry, I believe implicitly in the ability of local authorities to get on with the job of rejuvenating our inner cities provided they are given a clear brief by government and the resources to carry out the task. They would recruit the necessary expertise. While far greater partnership between local authorities and the private sector is still desirable, and could be insisted upon by government as a condition of funding, I believe local authorities should be the prime movers.

The Government has signalled some relaxation in spending on construction next year. This is good news but another £1/2 billion will not keep pace with the accelerating rate of decay in our housing stock, nor will it have any effect on the need to build new council housing for rent to replace some of the stock sold off under "Right to Buy" legislation. I am persuaded by the continuing references to changes in mortgage tax relief that something needs to be done on this front, but what government would be brave enough?

I believe a constructive move in the right direction would be, in essence, to accept a compromise that first-time buyers and the less well-off will always need help. Mortgage tax-relief should only be paid at the basic rate of income tax and the limit reduced from £30,000 to £20,000. It has been calculated that would save £1 billion on this year's estimated Treasury subsidy of £4.75 billion. If government agreed that sort of sum being transferred annually into alleviating some of the inner city decline then real progress could be made towards the Prince of Wales' wholly justifiable goals.

## Tactical missiles

THERE are many RIBA members who dislike having the fag of electing a president rather than letting one emerge via the council. Others enjoy the opportunity for debate and discussion — and seven thousand have so far cast their vote for either Raymond Andrews or Rod Hackney. Whatever your view, there is one astonishing aspect to the current election campaign which is certainly new to the Institute, although commonplace in political life generally. This is the personal smear. And I find it surprising that Raymond Andrews, with backing from the RIBA president, should be resorting to this sort of tactic. In the last fortnight Andrews has accused Hackney of being like a "used-car salesman", "out of balance" (I wonder what that is supposed to imply?), like Derek Hutton and/or Arthur Scargill, the "subversive".

Meanwhile the president repeats his criticisms of the election tactics of

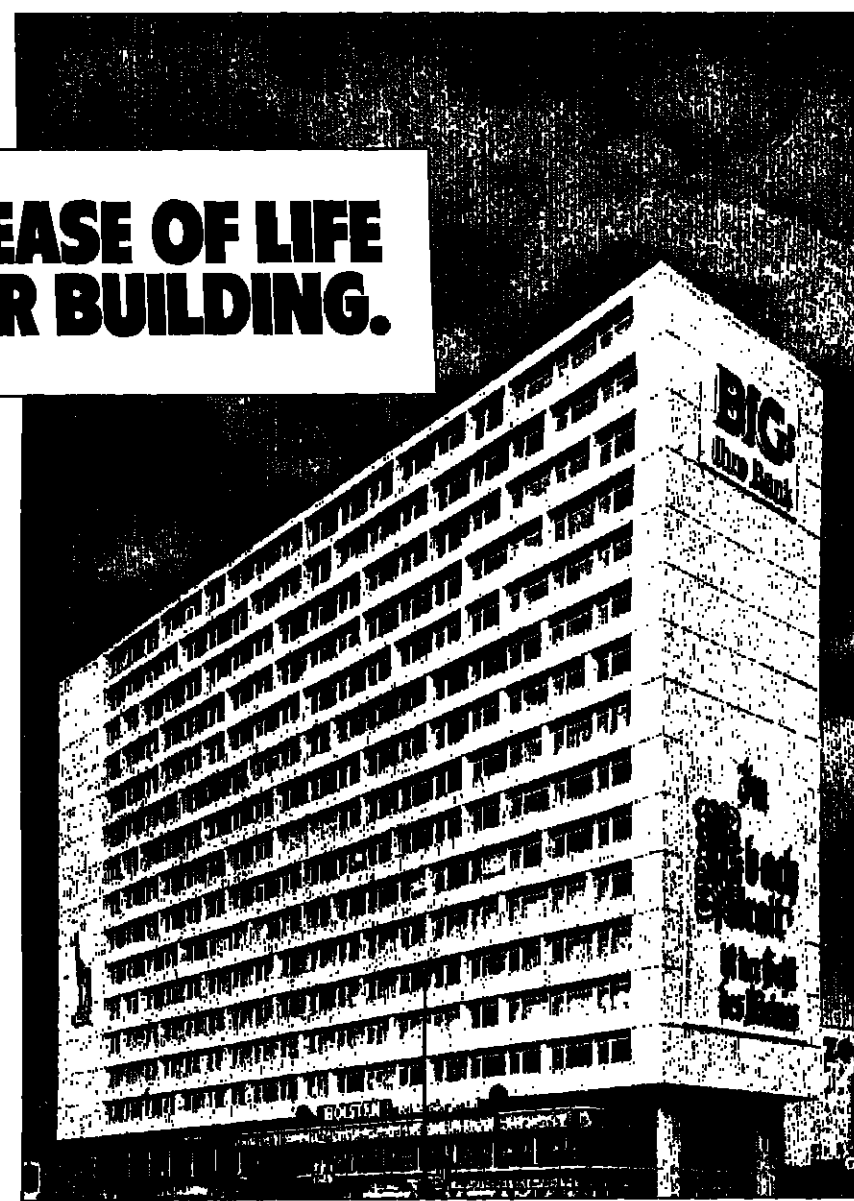
Hackney in relation to the UTA — for a full account of what is going on see *Scorpio* — and calls for an end to the unpleasantness. So far Hackney has not responded in kind and I hope he doesn't. It is good copy for journalists if election candidates descend to personal abuse, but does nothing for the reputation of the profession. The president, conscious of this, recently said the construction industry looked forward to a comic spectacle every two years. However, this election is quite unlike the last three, in that the primary issue is over a fundamental policy — whether the Institute becomes more involved and committed to ideas related to community architecture, though of course there are the usual claims and counter-claims about the importance of other areas. There seems to me to be a fairly clear-cut choice — a good conventional candidate or an outstanding unconventional one.

## The Editor's Comment



Readers will have the chance to hear more of the arguments of the candidates when we report next week on their first of their public encounters. Obviously other issues include the future of the library, education, the UTA presidency and so on. These are all serious matters and subjects which can be discussed rationally. Ray Andrews is commodore of the RIBA Sailing Club — but naval language is unlikely to win votes and influence people. As for the president, he should not become personally involved in the election. When he himself was a candidate, would he have expected the then president, Michael Manser, to intervene publicly on behalf of his rival?

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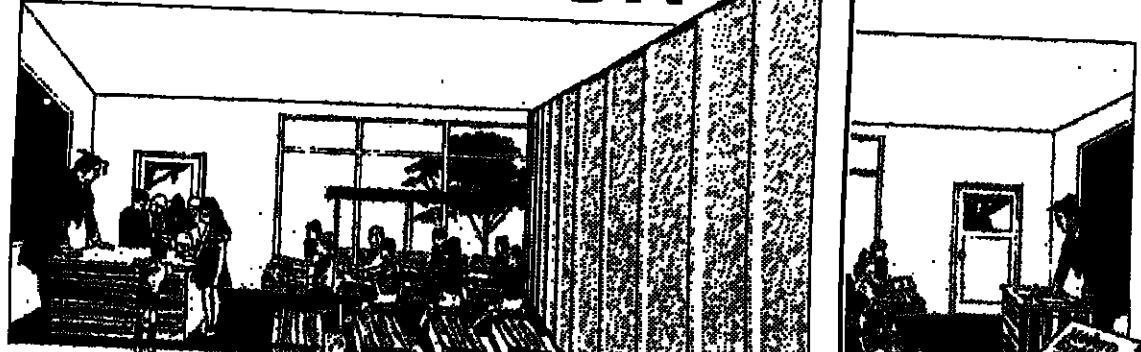
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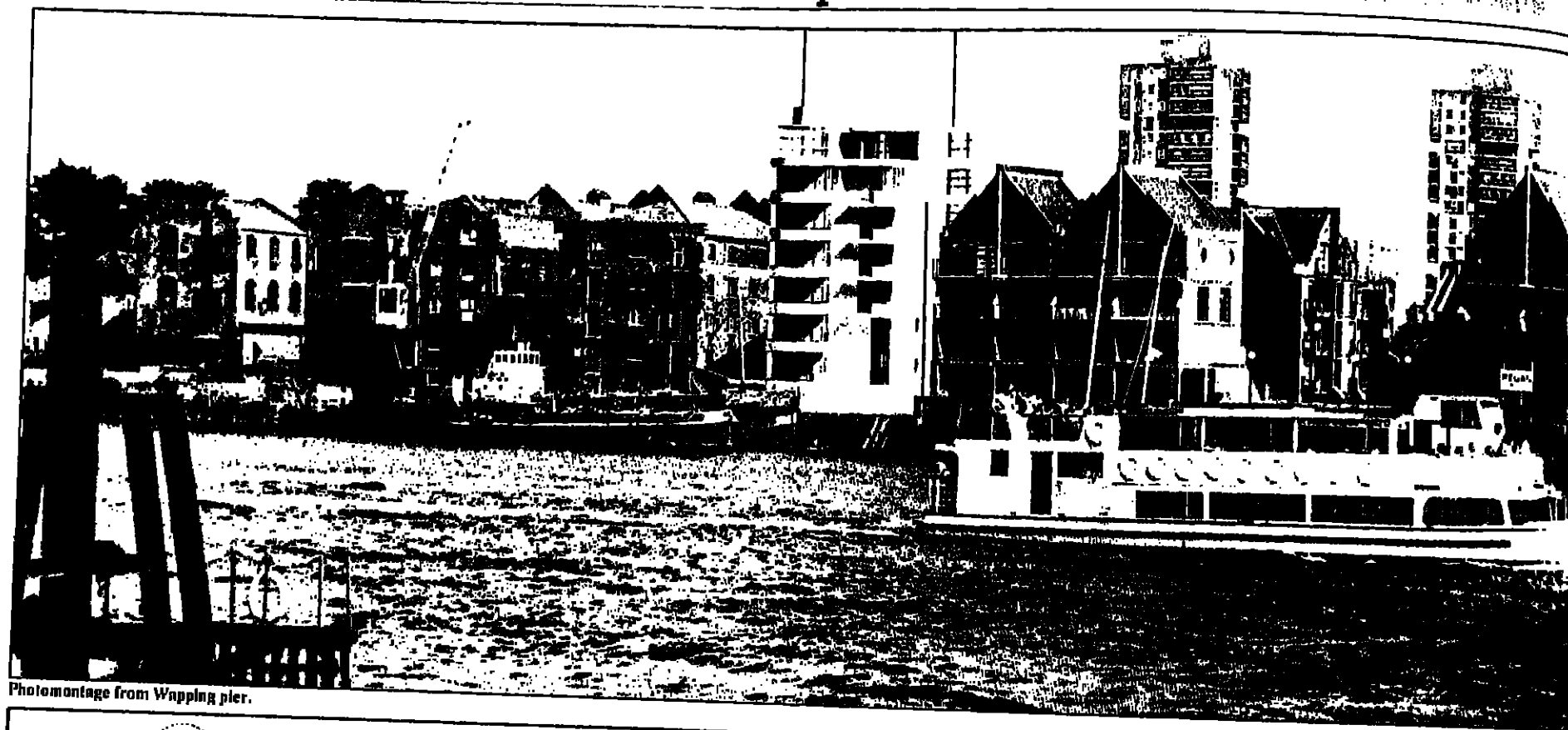
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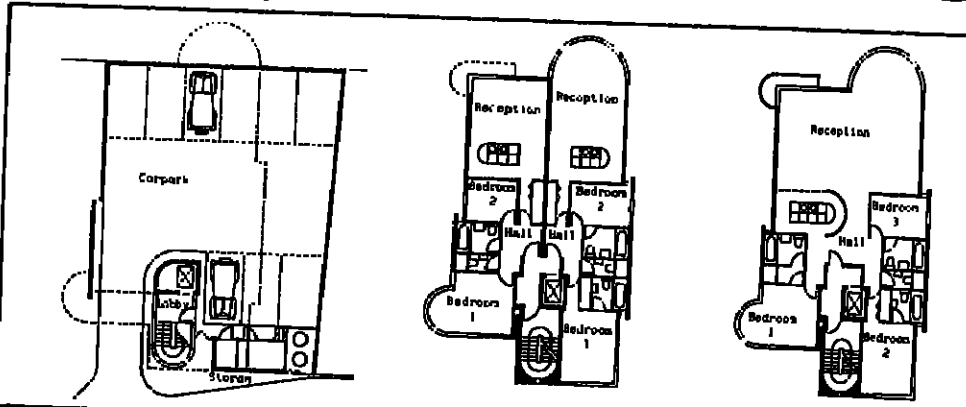
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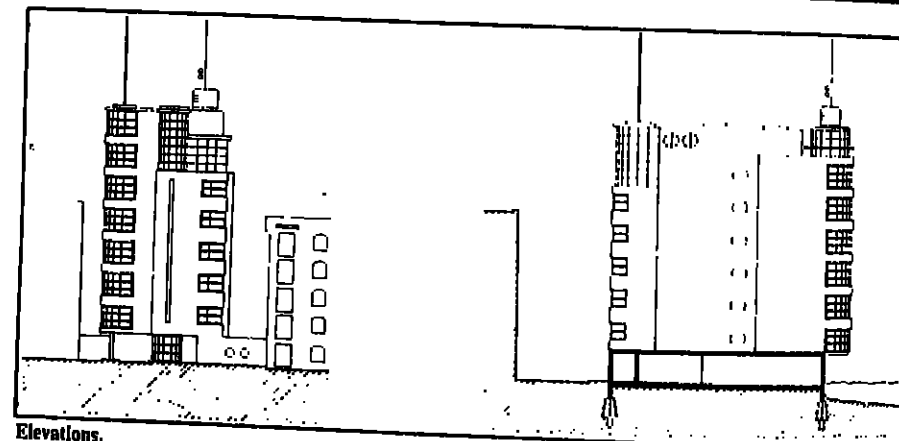




Photomontage from Whapping pier.



Above left: plan of the ground floor, centre: the first floor (two apartments) and right: a typical upper floor (one apartment).



Elevations.

## When Modernism means historicism

IF London's Docklands don't generate the most pleasant environment in which future generations can live, work and play, they will certainly provide the architectural historian with plentiful, if somewhat confusing and contradictory, material with which to piece together the story of our confusing and contradictory times.

Nowhere will this be more apparent than at Elephant Lane where, amid a number of retained 19th century warehouses, a competition-winning housing scheme has recently been built (by Corrigan, Soundy & Kilnidi) and permission has just been granted for a "Modernist" apartment block to the designs of Troughton McAslan.

And while Elephant Lane represents a contemporary reinterpretation of Thameside vernacular in brick, tiles and

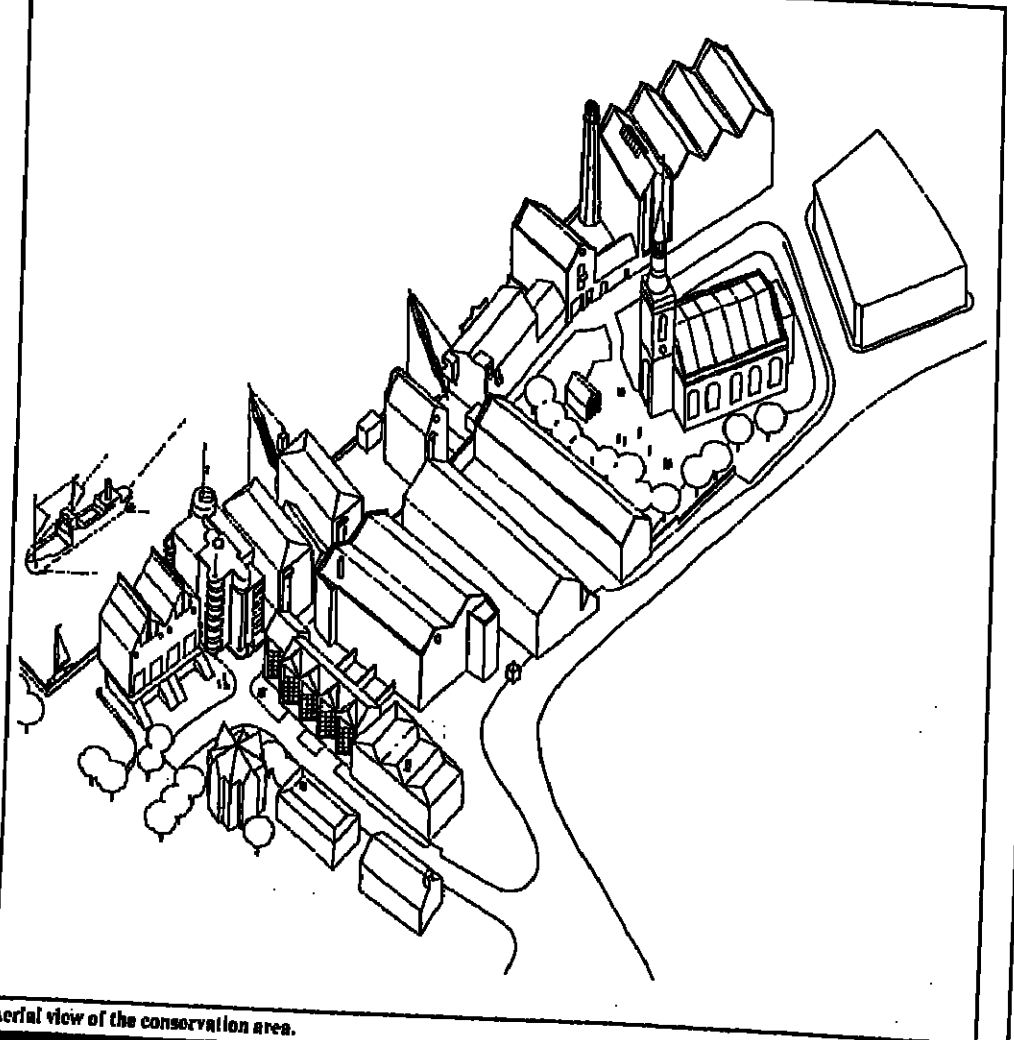
concrete, the adjacent scheme will recall (according to the designers) the work of modernist pioneers like Mendelsohn, Connell, Ward & Lucas and Frank Lloyd Wright, with its ribbon windows, curved bays and balconies and nautical references.

The apartment block is set in the Rotherhithe conservation area and its plans have the support of both Save and the Royal Fine Art

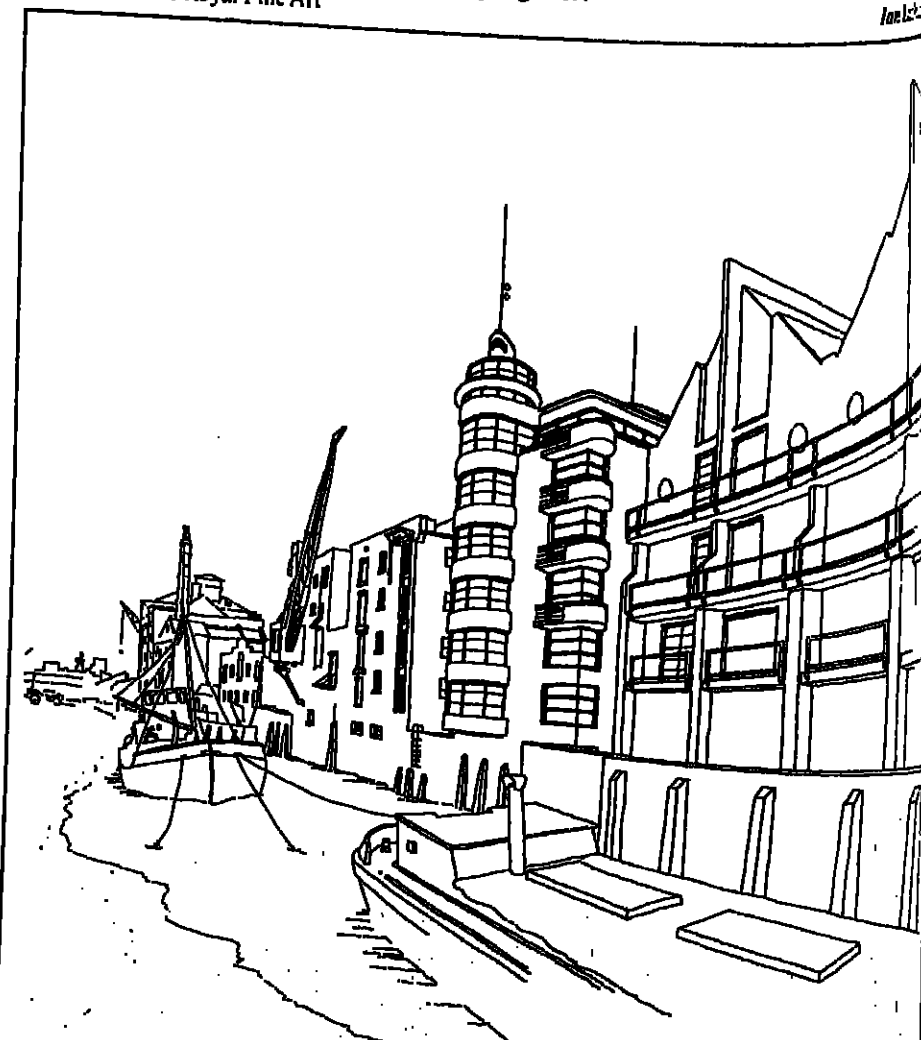
Commission, who are both presumably happy to encourage development of a rich and varied urban environment along the particular stretch of the river.

Troughton McAslan's comments accompanying the scheme-giving a "clear reference to the (Modernist) past", paying "homage to the nautical tradition and to buildings like Millwall Flour Mills, Rotherhithe Church", while "staying clear of the wretched pastiche" — indicate their concern with the stylistic and contextual aspects of the building, and as such the proposal can be seen as a historicist in approach, perhaps more overtly so than Elephant Lane itself.

The scheme will start on site next spring and completion expected by spring 1988.



Aerial view of the conservation area.



View from the river.

## Scorpio



### Strange case of the headed notepaper...

LARRY Rolland is infuriated by a letter written by Rod Hackney, on RIBA-headed notepaper no less, to the presidents of all the UIA affiliated institutions. It promotes Hackney's candidacy for the presidency of the UIA — against the institute's official candidate, Owen Luder.

But was Hackney wrong to do so? The answer lies in the minutes of a meeting on June 19 of the institute's UIA sub-committee — attended, amongst others, by Mike Austin-Smith, Geoffrey Darke, John Fidler, Philip Hodgkinson, Geraint John, Philip Jordan and Bill Reed.

These show that not only did the committee unanimously reaffirm its decision in favour of Hackney being the institute's nominee for the UIA presidency, but that this should be made clear to the national sections within the union. What is more, so alarmed was the sub-committee by the way in which its own recommendations were blocked by policy committee and the president, that it considered measures including resignation en bloc and asking Luder to stand down from the election.

The sub-committee expressed its dismay "over the lack of formal consultation on these matters and the lack of production of any evidence to support decisions taken by the RIBA president and policy committee".

And finally the committee decided that "it was its duty to inform the UIA general secretary and the national sections of the views expressed".

Strangely enough, I do not recall these matters being aired at the council meeting when Luder was adopted as candidate, but there is obviously a simple explanation I have overlooked.

● Memo to mole-hunters: this information did not come from Hackney.

### Suitable for broadcasting

CONFUSION over the role of buildings in the new BBC design awards was neatly illustrated by the following conversation at the BBC's press conference, held at the media's favourite cattery, L'Escargot.

Asked by Scorpio if the new Lloyd's building would be eligible for entry produced a varied and conflicting response. The BBC producer who is responsible for the three design award programmes, convinced me that buildings of Lloyd's calibre were crucial to the award's success, while Jane Priestman, one of the judges, went weak at the knees when Lloyd's was mentioned — implying that exciting new buildings will stand little chance against freshly mown village green and all those carefully engineered motorway interchanges.

The final, probably correct answer must lie with Paul Ambridge, the Design Council's awards manager, who has the inenviable task of devising the rules.

Lloyd's can have two cracks

at the whip. It can be entered once as "a working interior" explained Ambridge "and secondly as an exterior that impinges on the public's environment". There is no category for unrealised BBC headquarters designs.

### Minaret madness

LEON Krier's classical time-war may not be the only unusual addition to the Spitalfields skyline.

On the border of the development area is the Brick Lane Mosque whose proprietors have produced near-apoplexy in some conservationists with their desire to add minarets to the 1743 building.

I hear English Heritage, sore about internal work performed with ecclesiastical exemption, are advising Tower Hamlets council to refuse planning permission for the "clamping on" of minarets to the building.

But recognising the need for a mosque to express itself as a mosque they would be more favourably disposed to the erection of a separate structure on the restricted plot of land behind the building. Just like putting a church spire in the graveyard.

### Ageist policies

I THOUGHT "semi-mature" was a foodie word applicable to cheeses. In the Midlands, it turns out "semi-mature" describes people between the ages of 30 and 60.

Part of Walsall's housing policy is to cater for this previously unidentified sector of society by converting "multi-storey" blocks into "semi-mature" homes. Maturity means they fall down.

WHO worked on what department: browsing through old issues I notice that Quinlan Terry was an assistant to Stirling in the Leicester engineering building. Information on similar unlikely connections gratefully received.

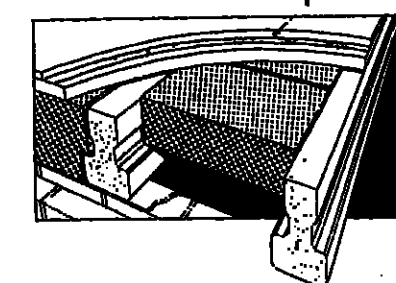
### 10 years ago

THE environment secretary has turned down plans by the Architects Benevolent Society for a retirement home on a site in Wallingford, Oxfordshire. The original competition-winning architect had been sacked from the project and new plans prepared. But the site was said to be too important archaeologically to be developed. Compensation was refused.

Building Design, November 12, 1976.



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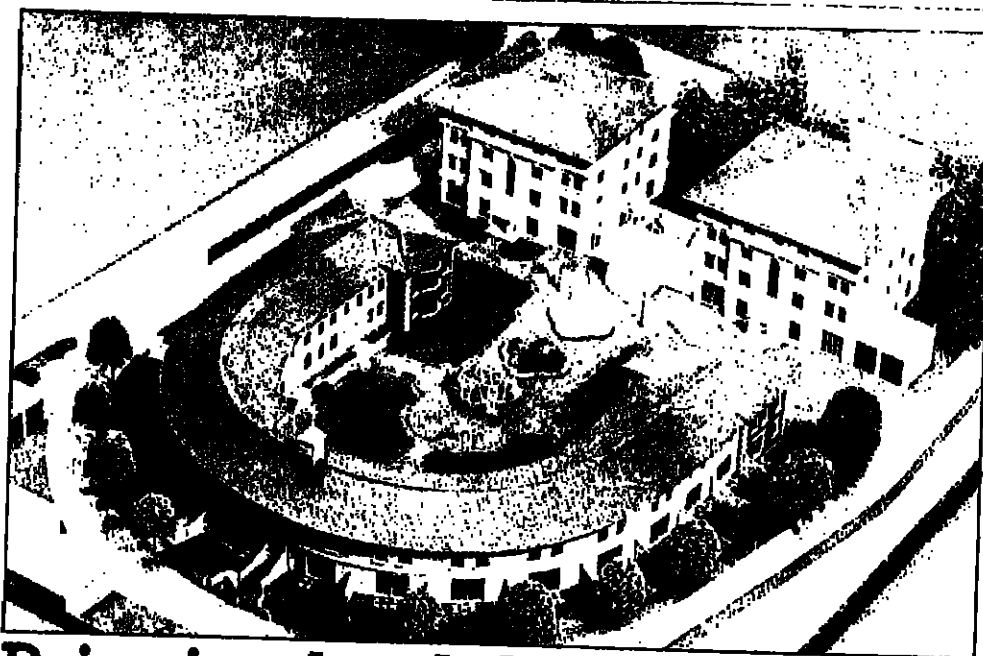


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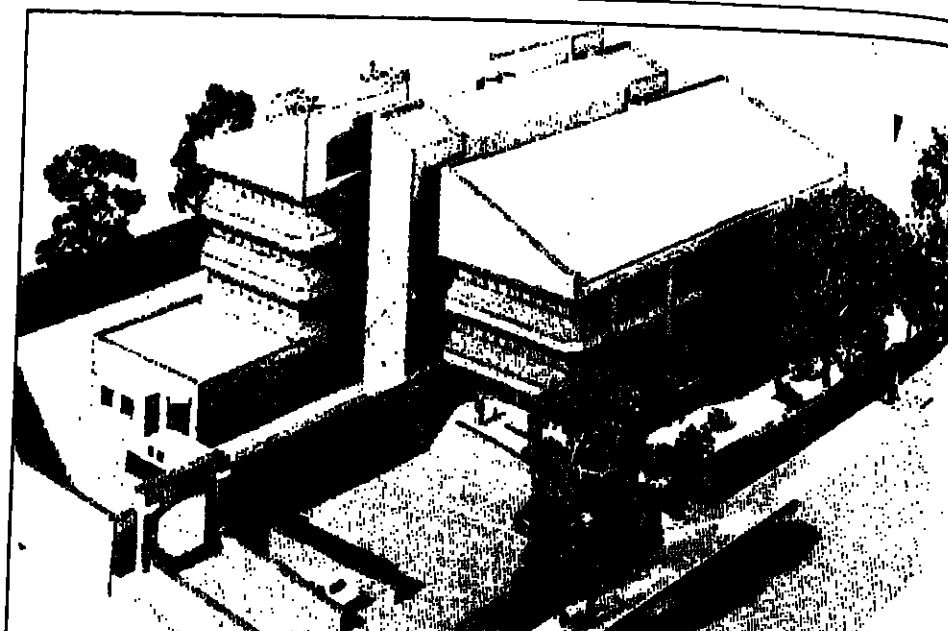




## Bringing back history

Pegasus Court Retirement Homes in Cheltenham gave architects the Falconer Partnership the opportunity to design the first horseshoe crescent there for 150 years. The show-houses reflect the traditional style and planning of the development which features a Victorian

timber conservatory with tile pattern flooring. It links the two Regency-style apartment blocks which front the development. The crescent comprises news cottages and apartments enclosing a formal garden with ornamental pond and rose arbour.



## Law recruit

The construction of a new divisional police station is underway at South Norwood, near Croydon. Raymond Smith & Associates liaised with the Metropolitan Police director of property services to design the £3.8m building, which has a reinforced concrete frame and basement with brick cladding. Completion is expected in December 1988.



## City offices

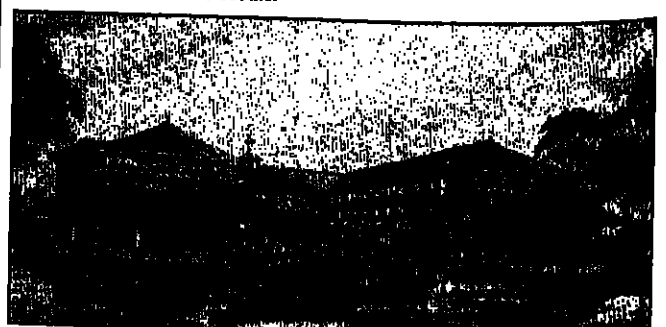
Right: This development at 9-13 Carlisle Street, London EC1, was designed by Ronald Ward & Partners for developers Highmury House. Work on it has now begun.

The £4.7m contract comprises 2230sq m of office accommodation with two ground-floor shop units and 10 luxury apartments. The building will be clad with reinforced concrete and quality facing brick, tile and Portland stone. The lead-faced mansard roof is to have dormer windows.



## New swallow

Denny & Bryan are architects for Swallow Hotels' new four-star hotel in Waltham Abbey, Essex. The 163-bed complex will cost £5 million to build and is due for completion in early 1988. Facilities will include a large swimming pool, restaurant, coffee shop, conference and function rooms.



## Triple echo

Work has just started on this £40 million hi-tech, hotel and leisure scheme on three separate sites in Reading, designed by Scott Brownrigg & Turner for developer Becontree Estates. Shown here is the hotel to be run by the Norfolk Capital Group while some 19,000sq m of hi-tech industrial space will be built in two other sites. Quantity surveyors are Burke-Collis & Partners, engineers Bunyan Meyer & Partners.

## Profile

# Design high-flier still on the right tracks

Jane Priestman is the new design supremo at British Rail. She talks to Tony Aldous.

JANE Priestman, who on November 10 took up the new position of director of architecture, environment and industrial design at British Rail, is not an architect. She continually regrets that fact, she says, but adds that she has worked closely and productively with architects during more than 30 years as a designer.

Priestman's new role is a challenging one — to reconcile BR's corporate identity with a separate identity for each of its constituent and increasingly autonomous businesses. "The identity for each 'profit centre' needs to be consistent with the central identity," she says. For instance, Network South-East's logo and colour scheme have to be distinctive but also fit in with overall BR house style.

She comes to BR from the British Airports Authority, where three years as design consultant have been followed by eight more as design manager — something BAA did not have before it appointed her. The need was in many ways similar to BR's present need — to ensure design consistency, but to reconcile that with the creation of an individual identity for each airport.

The public, she says, did not want "anywhere airports". So "each airport became a different place, yet with the same black-and-yellow signing". Gatwick, with its own warm, reassuring, cohesive personality, is probably the best example of that policy.

She has a broader range of responsibility than had, say, Bernard Kaupas as director of environment, and agrees that in the past BR may have suffered from different people and different advisory panels dealing with industrial design, environmental design or architecture. She covers all three. "The brief is wide open and very exciting".

At the heart of her job, however, is design consistency; and that, she argues, has as much to do with educating staff as with maintaining standards. Nor is it concerned exclusively — or perhaps even mainly — with new build. At BAA it concerned not just new airports or terminals but needed to be applied at several levels: new projects; "clip-on extras"; and "housekeeping". Her job was to maintain consistency and quality in all three.

At the airports authority, she has enjoyed working with architects YRM on Gatwick's second terminal, which opens in 1988, and with Norman Forster on Stansted, which "will be a very good airport. It was a good brief". She says Heathrow's Terminal 4 has been unfairly criticised, and that those who use it as passengers find it works well.

British Airports Authority has a policy of employing outside architects and designers. "It was the interface with consultants and their aspirations," she says. In that respect, British Rail — with in-house regional architects and their teams handling most of the workload — will be rather different.

Jane Priestman is in some sense an architect manque. A

scholarship took her to Liverpool College of Art and she started in design on textiles and interiors, working in Australia and then in the design offices of both Heals and Marks & Spencer. "I've always regretted not going into architecture, but right from the start I've worked solidly with architects".

Her ex-husband Martin Priestman is an architect, now a partner in the Stevenage-based Priestman Bennett Partners. They worked together on many jobs, including Hertfordshire schools in the 1960s. One son, Matthew, has recently qualified as an architect and is now starting up a practice. The other son, Paul, studied at the Royal College of Art and is currently setting up his own design group.

But Jane Priestman is, as she puts it, "very much an all-rounder", working also with sculptors and landscape designers. Indeed, the BAA improvement that gives her most pleasure is Darbourne & Darke's landscape work in Heathrow's Central Area, including the bus station. "It's the best work by far at Heathrow. I wish we could carry it further, for all the spaces between the central area buildings — which at Heathrow are very important".

By contrast one thing that makes her grit her teeth is "the generally disgraceful way the public treats its facilities" — litter and worse. But, she adds, "I'm a great believer in raising standards through improving how people behave: by creating responsibility and pride in what you're dealing with".

She cites a Henley Forecasting conclusion that rising standards in people's private environments are making them expect high standards in their public environment.

She believes that this trend will gradually influence people's behaviour for the better. It may be that the lack of litter and graffiti in Britain's airports reflects not only high standards of day-to-day and hour-to-hour maintenance, but also a public which is responding to those standards.

Her private pleasures include opera, travel and city architecture. She is encouraged at the trend to conserve and re-use good buildings in both North America and Europe.

She dislikes much of the pastiche architecture now in vogue in London, but on the

other hand is not an admirer of Richard Rogers' Lloyd's building. "It looks magnificent at a distance, but fails at street level. Its relationship to Leadenhall Market is an insult to the pedestrian".

Perhaps Victorian street-scapes is one of the reasons why she lives in Islington; another is that this inner London district is a "mixed society". It will certainly be convenient for her new British Rail job.

Priestman furthers her crusade for design and design management to be treated more seriously in Britain in a variety of ways — lecturing to art college BA and MA students,

judging for the Design Council, and recently as a member of a NEDO committee chaired by James Pilditch which aims to bring design and industry closer together. She has recently cut her commitments "because I like to spend some weekends with my family".

Priestman is an agreeable, lively and remarkably young-looking 36. Late, she says, to be changing jobs. "It's interesting that BR should be taking on someone at my age". It is likely to be an education for both parties; but it will, one suspects, prove even more of an education for many BR managers than for her.



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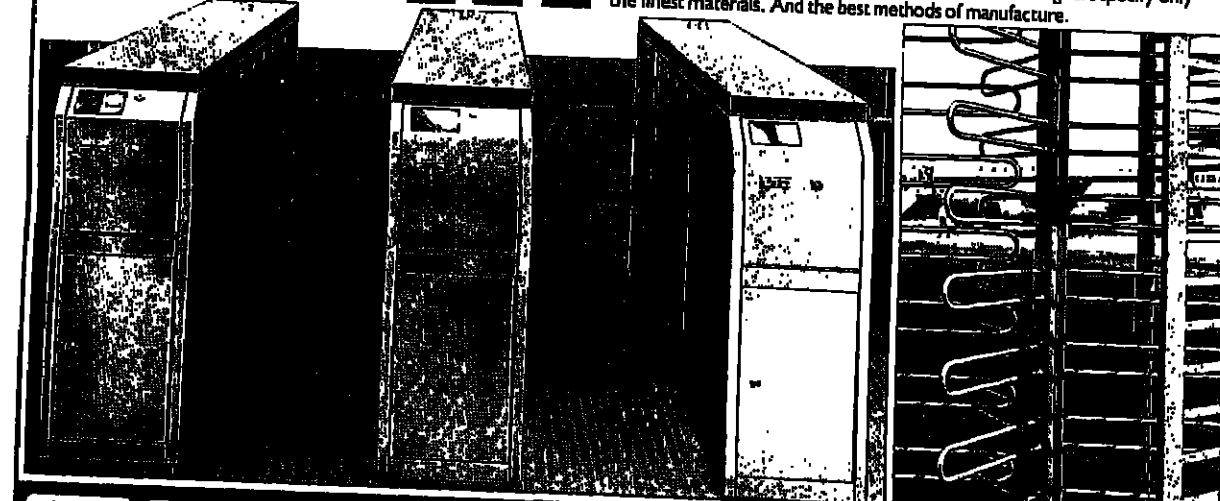
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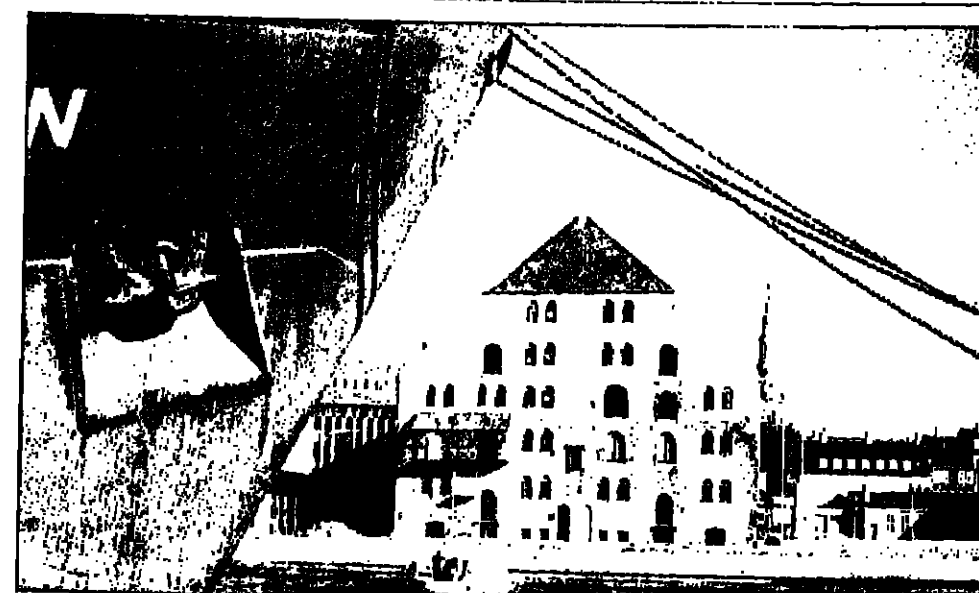
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## Denmark

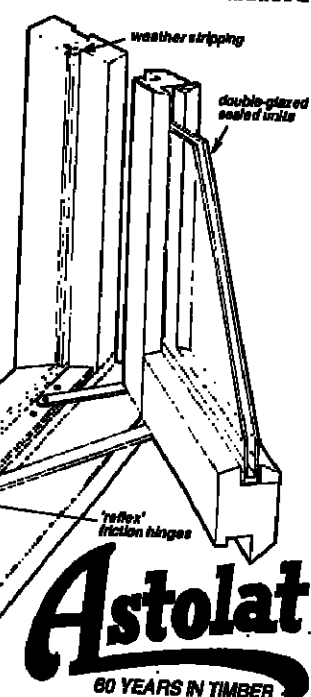


The exterior of the 19th century warehouse was scarcely altered. The roof was relaid and dormers rebuilt.

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DENMARK's new Centre for Architecture on Copenhagen's waterfront is a splendid blending of the old and the new in the country's architecture.

Located in a 19th century warehouse known as Gammel Dok Pakhus, in the old Christianshavn section of the city, the centre preserves all the original beam structures. The exterior was scarcely altered. The great roof was relaid, and many of the dormers rebuilt, giving a greater daylight access to an unusually deep building.

The heavy rustic structure has been retained and most of the floors have been sanded and bleached, and the walls are mortar-brushed and painted white. Architect Erik Møllers has produced an environment which centre director Hans Hartvig Skaarup believes will help produce a further leap in Danish design.

The building fell vacant 10 years ago, and was bought by the state. It was intended to use the site as part of a new complex for the nearby ministry of foreign affairs.

But external events produced a dramatic change in the impetus of Danish society, and led ultimately to support for an architecture centre.

The oil crisis of 1973-74 told the Danes that their rising standard of living was dangerously conditional on imports of energy and raw materials. Danish architects had an "old dream", as Skaarup puts it, of a centre similar to the ones the Finns and the other Scandinavians already had. But when they took their plan to the ministry of housing in 1982 they could not have imagined the response.

Within three weeks the Gammel Dok was made available, along with 42 million kroner - around £10 million - for the



1,300sq m on two levels is available for exhibitions.

## Designer's showcase

rehabilitation and conversion work, and the running costs for the first three years. What the government saw in the centre was an international showcase for the Danish construction industry.

The export of Danish design provides much-needed foreign currency, and practical people as they are, the Danes have turned architecture into a real money-spinner abroad.

Henning Larsen's first prize in the international competition for the ministry of foreign affairs in Riyadh, Jern Utzon's prize winning Kuwait parliament; Arne Jacobsen, Dissing & Weitzing's national bank in Kuwait; the prize-winning scheme from Skaarup's own practice for a bazaar in Abu Dhabi - prestigious projects and vital earnings for the Danes.

Skaarup's own practice has seen its work abroad expand from the Middle East, to Africa and now to Malaysia; 60 per cent of its fee earnings are from overseas.

The Danish Centre for Architecture was established as a private foundation by the Federation of Danish Architects, the Danish Association of Practising Architects, the Danish Association of Consulting Engineers, the Society of Engineers of Denmark, the Federation of Crafts and Small Industries, the ministry of housing, the ministry of cultural affairs and the ministry of

foreign affairs. In the architects' part of the building - the other half is used as workshops for arts and crafts - there are two levels of exhibitions, about 1,300sq m, a restaurant, an international bookshop, and an auditorium with seats for up to 200.

Another level comprises the administrative area, meeting rooms for courses, seminars and conferences, and magazines are available in the basement.

One floor is given over to the Danish Building Export Council, which plans and co-ordinates all Danish construction activities abroad. But no one should think that the centre is there simply to boost exports, Skaarup explains.

"We wanted a centre from where we could work for an understanding of architecture, an understanding of what good design was," he says. "How could we show the Danish people, for example, what is good and what is bad? Next year, for instance, we are going to have an exhibition called 'It's Your Choice'."

"It's about what is good and what is bad in architecture and design. We are going to raise one million kroner to produce the exhibition."

Skaarup and the centre are also determined that the exchange of international exhibitions will become a feature of Gammel Dok. "Our second exhibition was about the work

of the famous Swedish architect Gunnar Asplund, who, in 1940, we got the Sweden. At the moment working on an exhibition. Steen Eiler Rasmussen wrote the London book."

Skaarup believes it is time to say how successful they are. But thousands of visitors have taken away from the centre of old Copenhagen to Gammel Dok.

"They are coming to see these Danes are doing. I'm really trying to get out deeply involved in export before? And we must say, we are."

Skaarup says that one tell the story of the centre's indication that Danish architecture has found a new role. "The need to look for a abroad stimulated our work home, and I believe the creation of our architecture of a high standard, judging by the number of international competitions won."

"We believe the centre provides the conditions for further development of architecture. The professional whole is beginning to understand the usefulness of exhibitions, and a continuous stream of exhibitions, the most titled 'Greenland, Yesterday and tomorrow'."

"It is a milestone exhibition because our Greenland Technical Organisation is moving Greenland on January 1. It's great parts of the exhibition go with them."

And they never forget an export market. The centre is to sell the exhibition to Canada, Alaska and the Soviet Union, that they can see how the architects have developed technique of building in a climate.

Paul Fildes



Above and right: most of the floor has been sanded and bleached and the walls are mortar-brushed and painted white.



THE Danes never tire of letting the rest of the world know how to do things better, especially when it comes to building science.

Of course, it's partly to do with selling more abroad, and for a country with a raging balance of payments crisis, that is no bad thing. What the Danes also want to get across is the fact that they have had some outstandingly successful policies over the last decade.

And the country's pride and joy is the astonishing changes made in the use of energy for heating buildings, both in terms of space and water. Even a statistical presentation makes you sit up and take notice; the figures were enough to send department of energy officials scurrying off to Copenhagen recently to find out how it is done.

Domestic heating accounts for 28 per cent of Denmark's total energy consumption; that figure is 30 per cent lower than the 1975 level.

Allowing for the increase in heated area, the saving amounts to no less than 47 per cent per sq m. The achievement has been accomplished through a complex, yet sophisticated energy conservation programme that at the same time encourages good as well as experimental design.

The story really begins in 1973, when Denmark was hit for six by the oil crisis. A country which lived almost entirely off imported oil, Denmark saw its new prosperity disappearing. Grants of about £300 million were made available for energy-saving measures in houses, flats, shops, commercial and industrial buildings during the period 1975-1985.

But the real breakthrough came at the end of the 1970s. In February 1979, new building regulations came into force. The Danes believe they are among the strictest in the world. Insulation requirements for new buildings were doubled, and they have got tougher still.

For example, a 100sq m house must only use about 9,000kwh a year for heating and ventilation, plus energy for heating



Superinsulation on this housing estate in Gervinge designed by Borge Kjaer consumed 60 per cent less energy than normal insulated houses.



The occupants of this property in Copenhagen decided to build a glass facade over the entire yard side of the building which faces South.

## Denmark

## Energy efficiency — probably the best

domestic hot water. In all, that corresponds to annual oil consumption of 1,300 litres.

In 1981, parliament passed the Heat Inspection Act, with the principal aim of bringing all pre-1979 buildings up to the energy economy standard of new buildings. The grants under the act triggered off an investment explosion. Almost £1,000 million was invested in the housing sector in 1981-85 alone, with grants accounting for about 20 per cent. Energy consultants were recruited in their hundreds by the Ministry of Housing. They had to be practising architects or consulting engineers with at least five years' experience.

Armed with a statutory list of conservation measures, the 900 consultants inspect properties, and report on the energy measures needed. They even advise on how to raise the money to do the work.

About 40 per cent of all houses and flats in Denmark have undergone an inspection. Since January 1985, all property owners have to inform prospective buyers about a building's energy condition, and that means getting an energy certificate from the consultant. The public sector falls under the legislation too. All public buildings have to be brought up to a reasonable standard of energy economy by 1990, and £150 million has been spent on them in the last four years.

The energy policy has become integrated into urban renewal programmes. Local councils can decide that energy-saving measures shall be carried out in residential properties that are not up to standard. A council can also decide that a block of flats should be connected to the

district heating system, and grants are available for all works covered by such decisions.

In private rented properties, tenants can demand a heat inspection, and force the landlord to carry out the work if they agree to a rent rise to help cover the cost.

The Danish Building Agency is conscious that some measures are carried out with "insufficient respect for the architectural values that exist even in rather anonymous buildings". So that the DBA, the department of the housing ministry responsible for the co-ordination and development of this work, has been campaigning for "improved renovation practice", aimed at councils, architects and owners.

A new scheme in Skive, Jutland, comprises 52 one-storey and two-storey terraced houses and four detached houses. The closely-grouped houses are supplied with low-temperature district heating, which is shut off during the summer. Twenty-eight get their hot water from electric water heaters, 22 are supplied via heat pumps and the last two by a solar heating unit. The first year's results have been promising, with consumption averaging 5,300kwh a year for a 100sq m house.

Energy conservation is only part of a success story which saw parliament vote last year to reject nuclear energy in Denmark. In 10 years, Denmark has cut its dependence on foreign sources of fuel by half, intro-

duced windmill technology on a large scale and pioneered other forms of alternative energy.

Last year, the Danes sold 3,000 windmills in America. Danish utilities will install a wind power capacity of 100MW during the next five years. District heating for space and water heating has risen from 30 per cent in 1972 to about 42 per cent in 1982, and now stands at 44 per cent. The massive project is responsible for the few traffic hold-ups in Copenhagen.

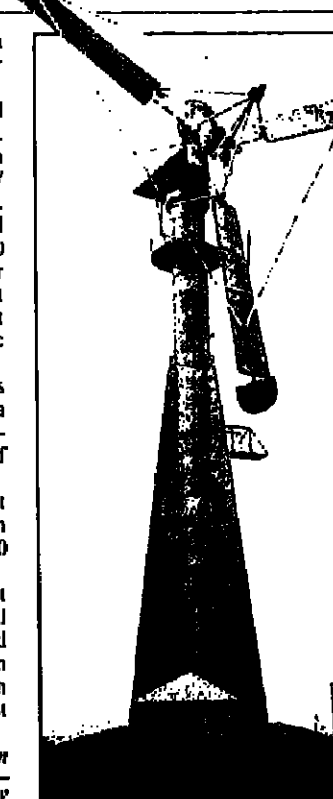
Five central local councils have combined to undertake a £200 heating project that involves laying 50 kilometres of tunnels under the city.

It is said to be the most extensive warm water system in the world, and will serve 200,000 homes and 500,000 people.

The town of Ringsted is in fact heated 100 per cent by non-fossil fuel. Half the energy is provided by an automatic plant run on surplus straw. It is one of 25 such plants in Denmark. The rest comes from recycling waste.

Paul Feldman

"A booklet, 'Denmark Uses Energy Better', can be obtained free from the Danish Building Agency, Stormgade 10, DK-1470 Copenhagen K.



Denmark has introduced windmill technology on a wide scale.

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# WYNDY CITY

Edinburgh's Old Town is the subject of a strategic conservation plan. Edwin Johnston reports.

THE architectural identity of Edinburgh's Old Town derives from a combination of its historic buildings, the organic qualities of its medieval street plan — enriched by a pedestrian network of closes and wynds — and above all, the unique topography of its urban setting in which it is juxtaposed across the Waverley valley with the formal discipline of the architecture of the Georgian new town.

Elevated on an elongated ridge, the Royal Mile descends with a gently curving street plan from the castle on its prominent outcrop on the west, and the lofty tenements of the Lawnmarket, to the Palace of Holyroodhouse at the foot of the Canongate to the east. Embracing two valleys, its historic atmosphere and picturesque qualities are enhanced by two further aspects, the varied relationships of bridges with buildings that span outwards to the north and the south, and the delightful views

of the city that range from panoramic prospects to glimpses of the distant townscape seen through a narrow medieval close.

Today, the Old Town fulfils a number of key roles in the life of the city. For example, it is a centre of city and regional government administration, and the law courts. Along its southern boundary are sited the educational institutions: Edinburgh College of Art (West Port); Heriot-Watt University (Grassmarket); Edinburgh University (Chambers Street/Cow-

gate); and Moray House (Canongate). But the Old Town is also an important tourist venue within the UK as a whole, and a measure of its expanding role at the heart of the Scottish tourist industry is reflected by the growing number of visitors each year to Edinburgh Castle, with 923,000 paid admissions in 1985. Overlapping with its tourist function, it is also a cultural centre, accommodating 10 museums, 13 galleries, and libraries. And with the provision of 42 venues, and the Fringe

booking office in the Iligh Street, it also plays a vital role in the staging of the Edinburgh Festival.

But what is the condition of the Old Town today, when perceived not only as a unique historic area, and a focus of tourist interests and festival activities, but also as a living and working organism within the life of the city as a whole?

The findings of the *Old Town Study Report* of 1984, which followed a detailed survey of the Old Town, (sponsored by Edinburgh Architectural Association and Edinburgh District Council and supported by the Manpower Services Commission under the community programme), present a contemporary picture of the anatomy of the ancient capital.

The report reveals that the trend this century has been one of a continuing decline in housing and industry, with a recent decline in the Old Town as a regional shopping centre. In the past, the inhabitants of the Old Town suffered from acute overcrowding, but for a considerable period the trend has been one of depopulation.

In the mid-19th century, and before the social improvements initiated by Dr Henry Littlejohn, the first medical officer of health for the city, the population was more than 40,000. By the beginning of this century, however, it was reduced to 23,000. In the census of 1981, the residential population had fallen to its lowest level at 3,142.

The report also found an imbalance within the present social structure of the community. Nowadays, very few families live within the Old Town, almost one third of people are of retirement age, and 22 per cent, including students, live in some form of communal accommodation such as hostels.

The decline over a long period in population is also reflected, to some degree, in a gradual erosion of one of the key historic elements that have shaped the texture and grain of the Old Town plan — the medieval close and wynd. In William Edgar's

View of Edinburgh over castle, map of 1742, 337 densely packed closes and wynds opened High Street and the Canongate. By 1895, and partly as a sequence of clearance for new Victorian streets introduced following the improvement acts, the number reduced to 184. Today, 110 closes and wynds survive.

In recent times, change emphasis in planning have brought about new opportunities for restoring the historic fabric of the Old Town, and preparing groundwork for its future. Two decades ago, in the development plan for Edinburgh, Old Town was then zoned primarily as a cultural and educational area.

The 50s and 60s were a period when the community structure of the Old Town underwent considerable change as many families were decanted to the new housing estates on the perimeter of the city. But in 1977, however, the Old Town was designated as a conservation area, and since then, a climate of opinion has favoured conservation coupled with renewal and regeneration.

Following the publication of the *Old Town Study Report* and a public exhibition of the report in the City Art Centre, the setting up in 1985 of the Edinburgh Old Town Conservation and Renewal Committee represented a major step forward in the creation of an administrative agency, to

ulate conditions for the revival of the Old Town. The chairman of the committee is Sir Jamie Stormonth Darling, and its recently appointed director is the architect Jim Johnson.

Broadly, the remit of EOTCARC (funded by Edinburgh District Council and the Historic Buildings Council), is to promote and co-ordinate action for the conservation, social and economic revival of the Old Town. The interests of EOTCARC extend across a wide spectrum, and are concerned not only with the maintenance of the historic fabric, but equally with the nature of new development proposals.

It makes recommendations for grants towards the repair and conservation of the external and internal fabric of buildings, and also has an involvement with planning applications. EOTCARC seeks to work in close liaison with local bodies, and six of its members are elected from the Community Forum, which represents 12 Old Town community associations.

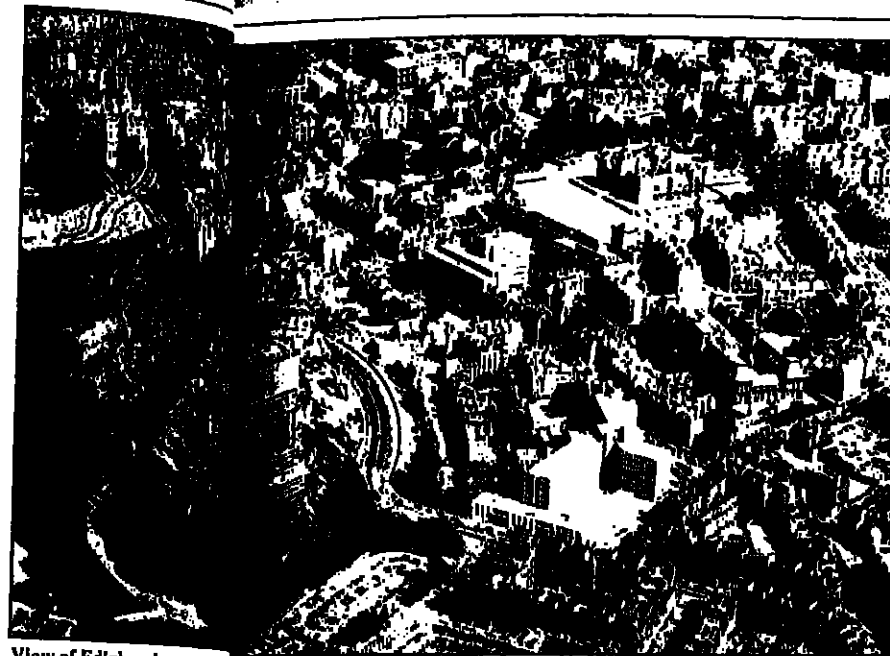
The priorities of the Old Town study, which provides the background for EOTCARC policy, established a need to build and balance the community structure; to encourage a mixed pattern of uses. For example, housing, shops, and small businesses in close proximity; to encourage the development of gap sites with new buildings sympathetic in design and scale to their historic context; and to retain, strengthen, and develop the potential of

the traditional pattern of closes. With regard to the present condition of the physical fabric of the Old Town, the study also identified areas of specific need — the location of gap sites, and disused and underused buildings. In 1984, 17 per cent of houses in the Old Town were vacant as compared to 5 per cent in the city as a whole.

Looking to the future, Johnston comments on a need for two kinds of research studies that would provide a framework for action in the process of revitalisation. One is an evaluation of the potential for future housing provision within the Old Town, and which, perhaps, might also consider the different types of housing agencies that could be involved. And the other would be a study that seeks to provide a framework for the development of tourism, and which might need to look at such things as traffic, car parking, and hotel accommodation.

If one considers some of the recent and current developments taking place in Edinburgh's Old Town, then the picture that emerges would suggest that the processes of mending the historic fabric, the renewal, and of rebuilding the momentum. A neighbour of St Giles Cathedral is the restoration of Advocates Close by McMennan & Brown, awarded second prize in the 1986 RICS/The Times conservation competition.

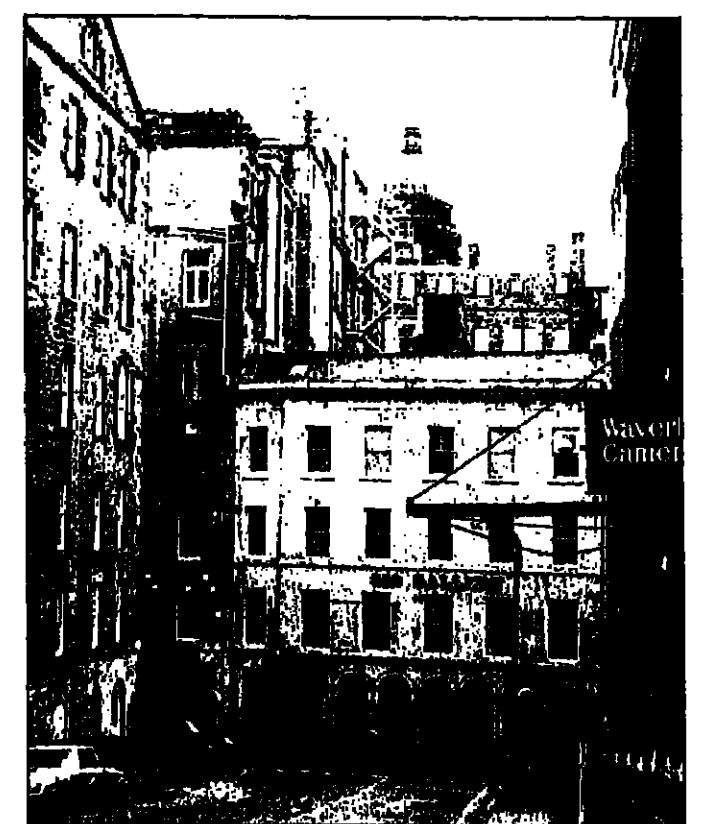
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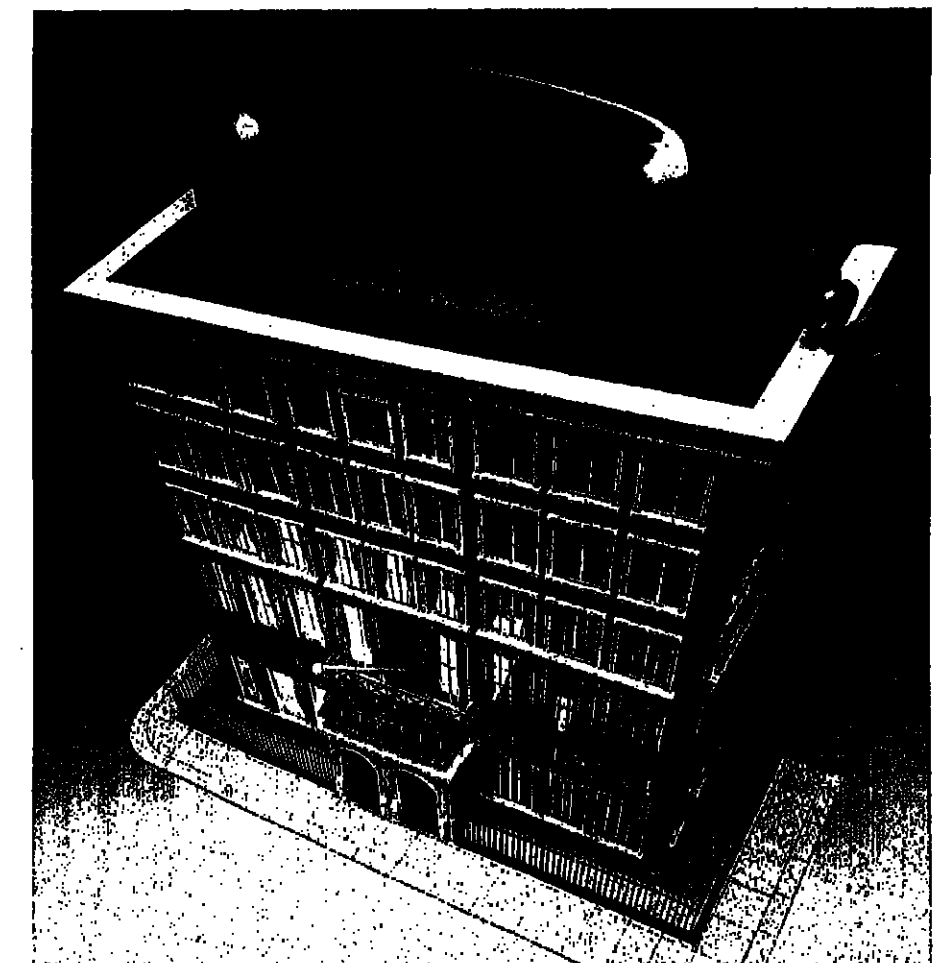
View of Edinburgh over castle.



Views of the recently restored 369 Gallery from Blair Street.



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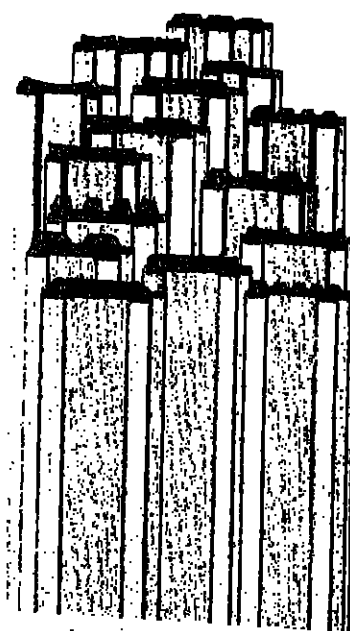
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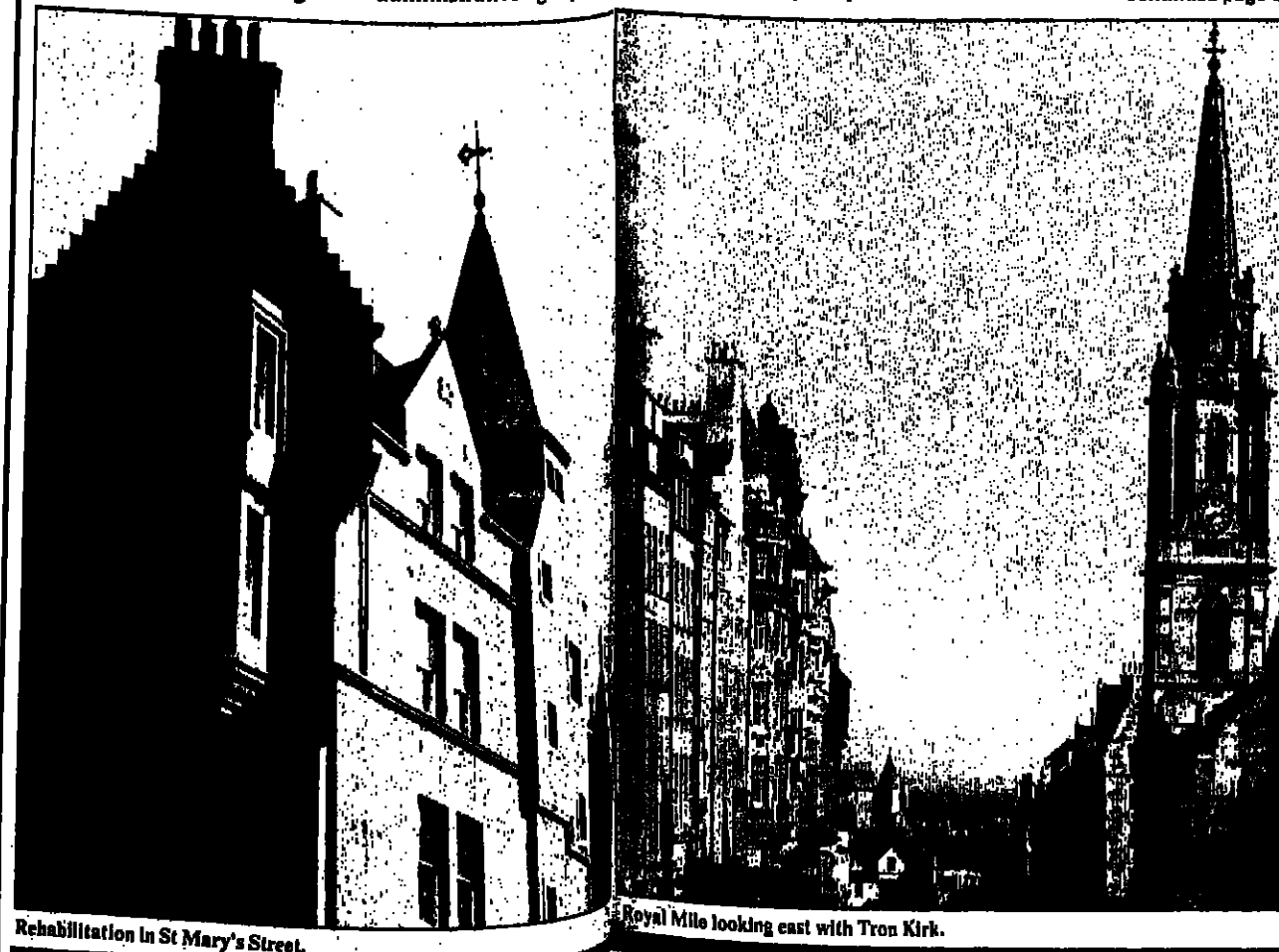
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Royal Mile looking east with Tron Kirk.

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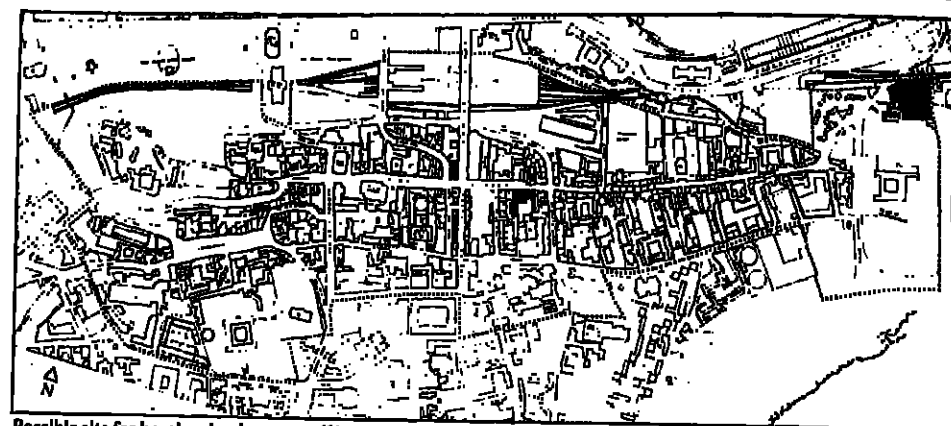
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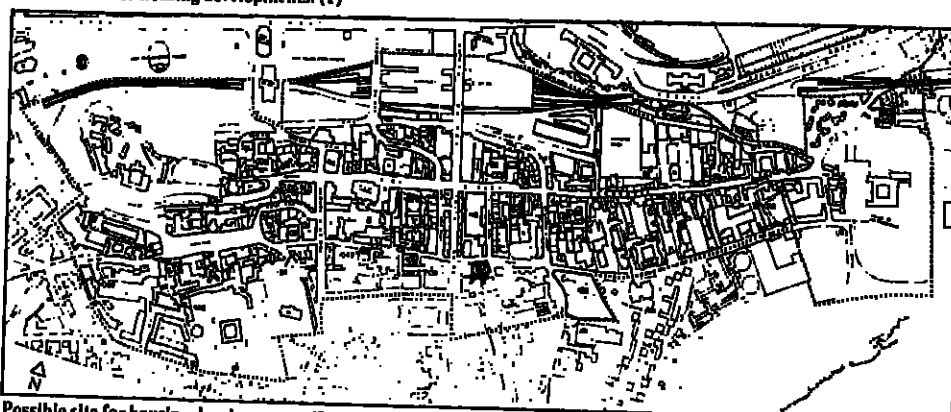
# Wyndy city

from page 19  
 Bridge, the Carlton Highland Hotel has been refurbished and expanded to provide 220 bed spaces. And on the west of North Bridge, an existing corner building which returns on the junction of the Royal Mile and Cockburn Street has recently been converted to provide 55 upmarket private flats for sale.  
 South Bridge, which dates from 1788, is a structure of 19 arches flanked by buildings that back onto Niddry Street and Blair Street, and which take up the fall in ground level from the Royal Mile to the Cowgate. It links the Old Quad of Edinburgh University by Robert Adam to the North bridge where the vista towards the new town is closed by Adam's domed Register House.  
 Over the years, the condition of the once elegant 18th century buildings have become much altered and dilapidated, and there has also been a decline in shopping. A preliminary conservation study of South Bridge has recently been completed,

and in the view of Johnson, this elevated street presents an opportunity for a co-ordinated conservation project, in which accommodation, now either vacant or used for storage purposes, might once again be returned to its original function as housing on the upper floor levels. Given the character of the original buildings, such a project would undoubtedly provide a much enhanced entrance to the Old Town from the south.  
 East of South Bridge, the most prominent gap site of the Royal Mile (0.48 hectares in area) is bounded by Niddry Street and Blackfriars Street. The site is the subject of a planning application for a new mixed development comprising housing, (112 flats), car parking, office space (1,588sq m), and shopping, with a proposed pedestrian access via a bridge spanning Niddry Street, and approached from an entrance in South Bridge.  
 Nearby to the Netherbow, and adjoining the restored traditional buildings of Tweed-



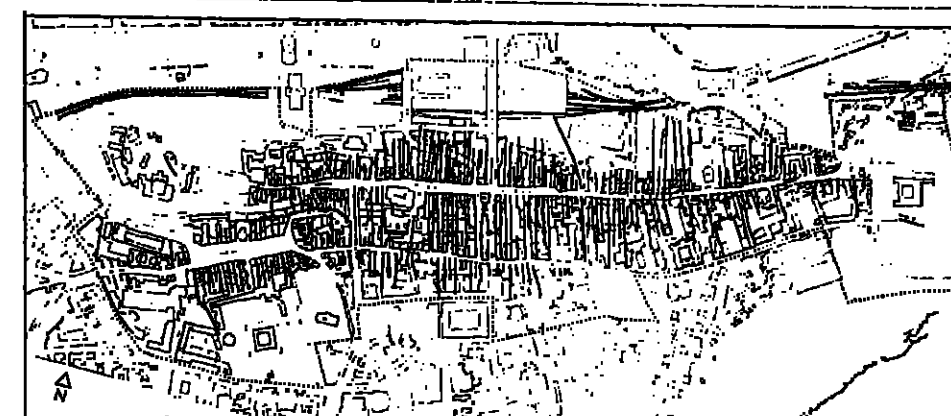
Map showing number of closes in 1742.



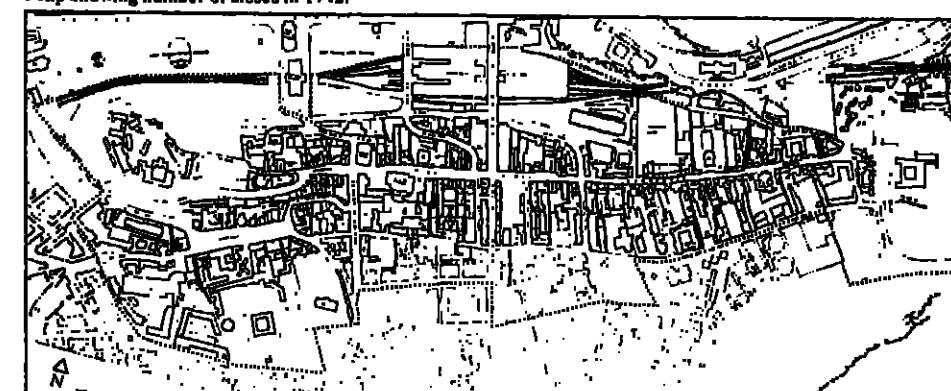
Map showing number of closes in 1984.



Restoration of Adam's Castle.



Map showing number of closes in 1742.



Map showing number of closes in 1984.

dale Court, is a new sheltered housing and rehabilitation development by Wheeler & Sproson for the Castle Rock Housing Association. On the street frontage, which retains an existing stone facade, a new home is provided for the Museum of Childhood together with shop units.

What was formerly an unsightly gap has been transformed by a six-storey building that successfully restores both the scale and continuity of the Royal Mile facade. The rehabilitation of housing in St Mary's Street and Jeffery Street, and the stone cleaning of its Scottish baronial architecture has brought back new life and colour to a street once blighted by road proposals.

South of the street frontage of the Canongate is the Old Town's largest redevelopment site, in proximity to the Palace of Holyroodhouse. It follows the closure of the Holyrood complex of Scottish & Newcastle Breweries, one of the Old Town's traditional industries. Scottish & Newcastle are considering approaches to redevelopment within the context of the Old Town planning and

conservation strategy, which would provide an opportunity for a mixed development, including a housing component, and perhaps also, where possible, the re-creation of some of the former medieval wynds.

The Cowgate housed in the valley south of the Royal Mile is punctuated by the scale of the arches of George IV Bridge and South Bridge. A busy traffic thoroughfare, it links the open public space of the Grassmarket to Holyrood Road, and contains a number of gap sites, some overshadowed by the heights of adjoining buildings. But here, too, there is evidence of the beginnings of renewal, in the restoration of a former Georgian warehouse, which is slated street facade, to provide a new premises for the 369 Gallery.

A feasibility study into the provision of visitor reception facilities in Edinburgh Castle by the Boys Jarvis Partnership, and a proposal to provide a new heritage centre in the redundant Tolbooth St John's Church in the Lawnmarket by Heritage Projects of York are two more examples of the trend to bring new life to Edinburgh's Old Town.



Housing infill in Blackfriars Street.



Scottish & Newcastle brewery site.



View of Niddry Street at the rear of South Bridge.



Sheltered housing development.

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## Hospitals



Each first-floor room opens onto its own terrace. (Pictures: Geoff Beekman.)



The first-floor sun-room is one of the most popular features at Lambeth.

# DISTRICT NURSING

In her second article on hospital building, Fiona Gorman looks at the emergence of community care centres.

STREAMLINING of the modern district general hospital has prompted the growth of community hospitals—in-patient and day care centres which owe a lot to the cottage hospitals of the past. Smaller Nucleus-type hospitals are not the sole reason for the re-emergence of this building type and, the Department of Health & Social Security would say, not the most important. That is the need for a more humane environment for the treatment of mentally ill, ter-

minally ill, the elderly and all those who require more nursing than clinical care. But the cost-cutting of district hospitals planned since the oil crisis has meant that some departments in these non-acute areas which were previously catered for have been hived off into smaller satellite units. Some consider these as the "hidden costs" of the quicker, "cheaper" hospitals. The DHSS argues that it makes little economic sense to keep patients in highly technological hospitals where beds are at a premium, when

what they require is intensive nursing care. Whatever the reasoning, the results are small-scale developments such as the Lambeth Community Care Centre and Whitlington Centre, designed by Edward Cullinan Architects, and the Mold and Ystradgynlais community hospitals created by the architects of the Welsh Health Technical Services Organisation.

The Welsh are taking the lead in establishing these purpose-built centres. The reason is geographical: so much of the country is difficult to traverse that a network of smaller scattered units makes the health service more accessible. For the Welsh the catchment area for one hospice may be as much as 50sq miles, while in London it is unlikely to be more than 4 or 5sq miles. There are only a handful of the hospitals in England and Wales, but it is a trend which the department wishes to encourage. In a health service programme where the aim is to reduce the average hospital stay and to ensure that each patient is

given the degree of care he needs at the right time and in the right place, community care centres fit in.

And the range of people catered for in places such as Lambeth and Mold may extend, says the DHSS, to more post-operative patients transferred after a day or two from conventional hospitals to rehabilitation. There is evidence to support the idea that patients who need to convalesce do so more quickly in a care centre than in busy clinical hospitals.

Here patients can be cared for under the supervision of their own doctors, without the rigours of a regimented hospital timetable of visiting hours and meal times. Patients are encouraged to have as great a say in the management of their treatment as possible.

But for all the department's enthusiasm for Lambeth and Mold, community care centres are not an area it gets directly involved in. If the boys at Euston Tower or Alexander Fleming House produced datapacks and guidelines in the same way as for Nucleus it would, says the department, be the death knell of the concept. It has to come from the community.

The catalyst for the Lambeth Community Care Centre was the proposed closure of the Lambeth Hospital in 1979. Both the West Lambeth Community Health Council and the local

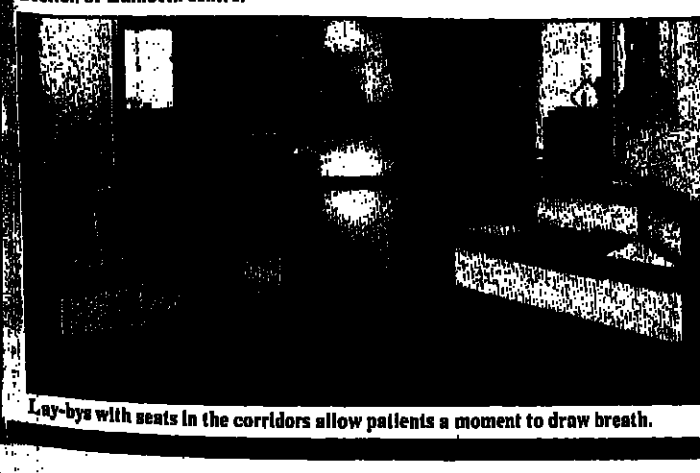
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First-floor plan of Lambeth



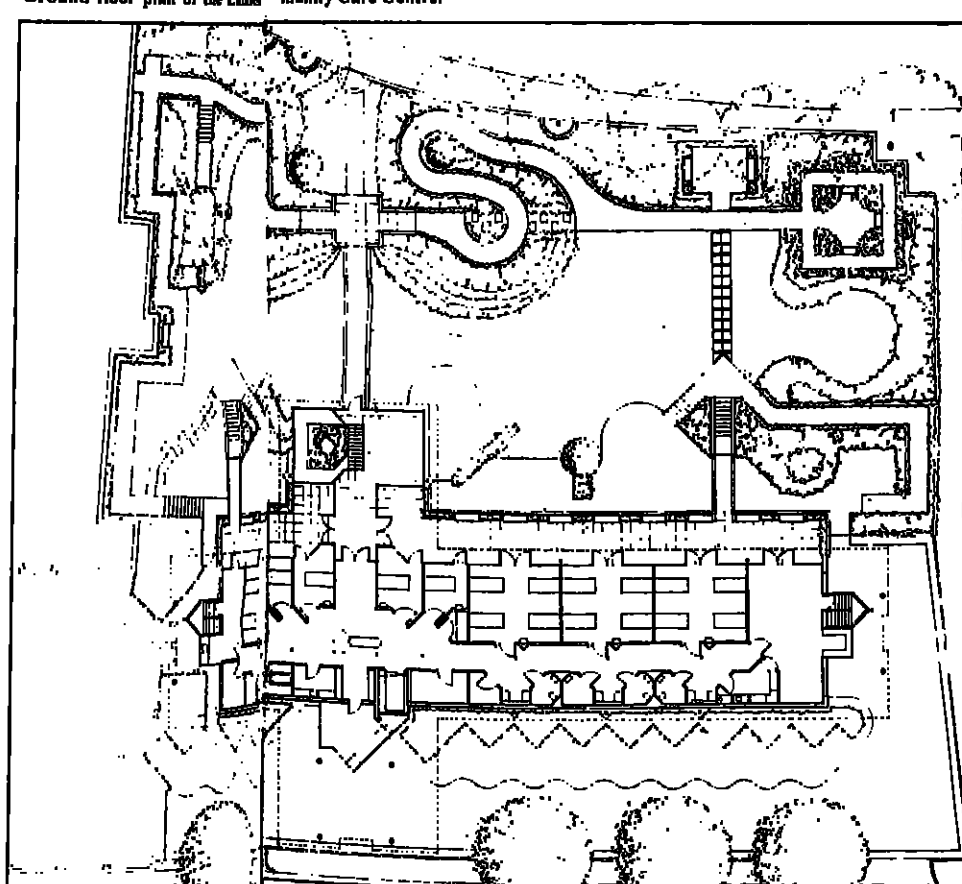
The porch at Monkton Street embraces visitors and draws them in.

Section of Lambeth centre.

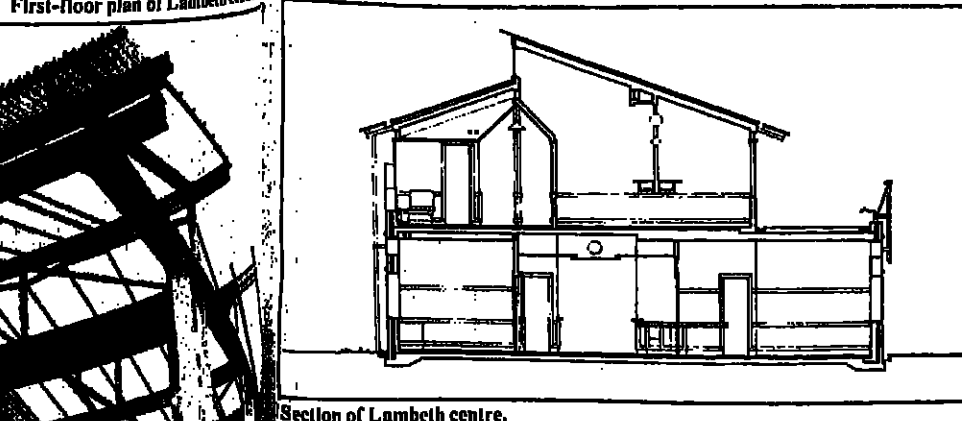


Lounge with seats in the corridors allow patients a moment to draw breath.

Ground-floor plan of the Lambeth Community Care Centre.



First-floor plan of Lambeth



## Hospitals



The Whitlington Centre caretaker works from the top of the tower.

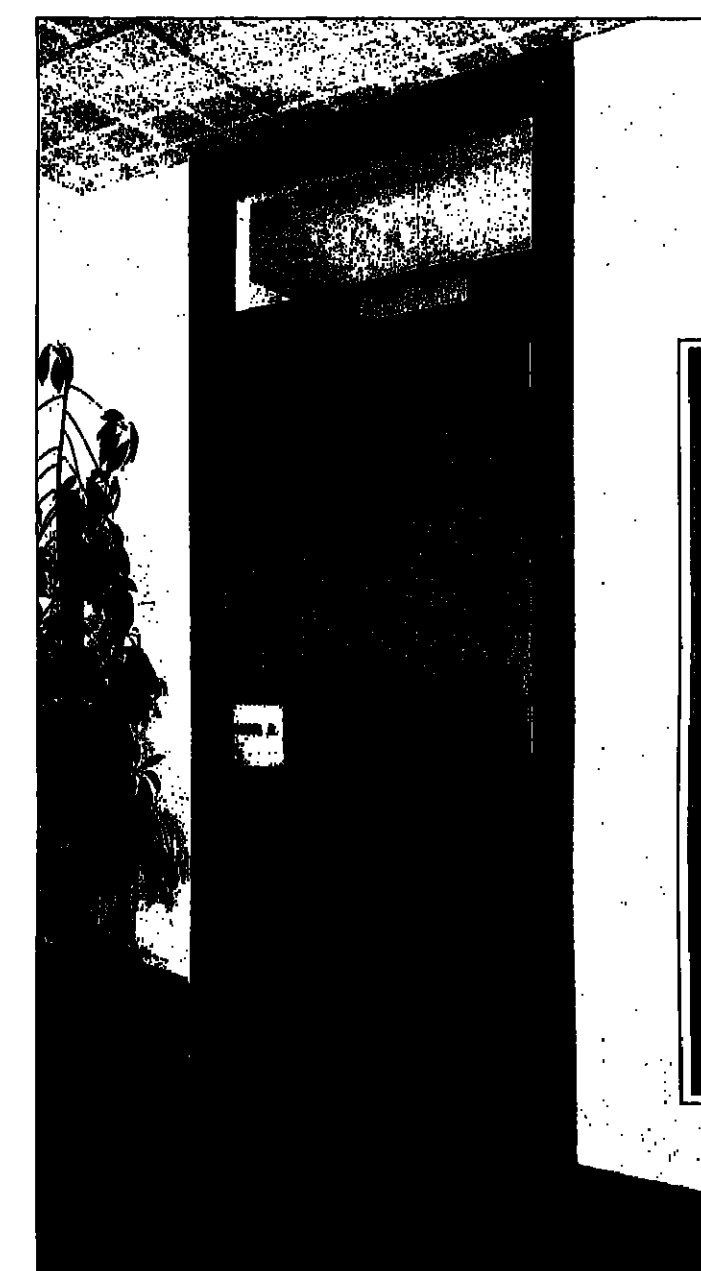


The minimum of doors have been used. (Pictures: Geoff Beekman.)



A glazed corridor surrounds the central courtyard.

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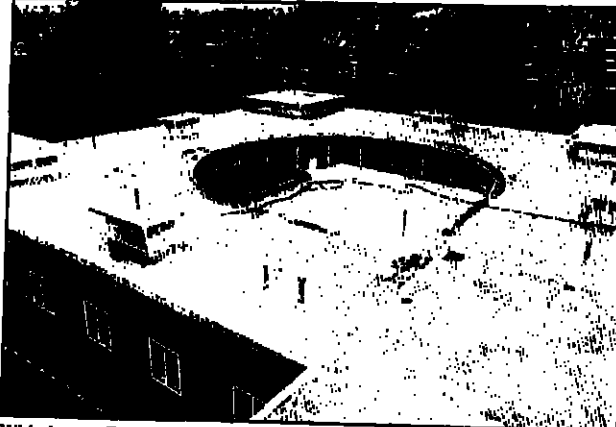
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Massive eaves exude a warm sense of protection at the Whittington.



Coursing has been used to reduce the apparent scale at Mold.



Whittington Centre seminar and staff rooms jut into the courtyard.

## District nursing

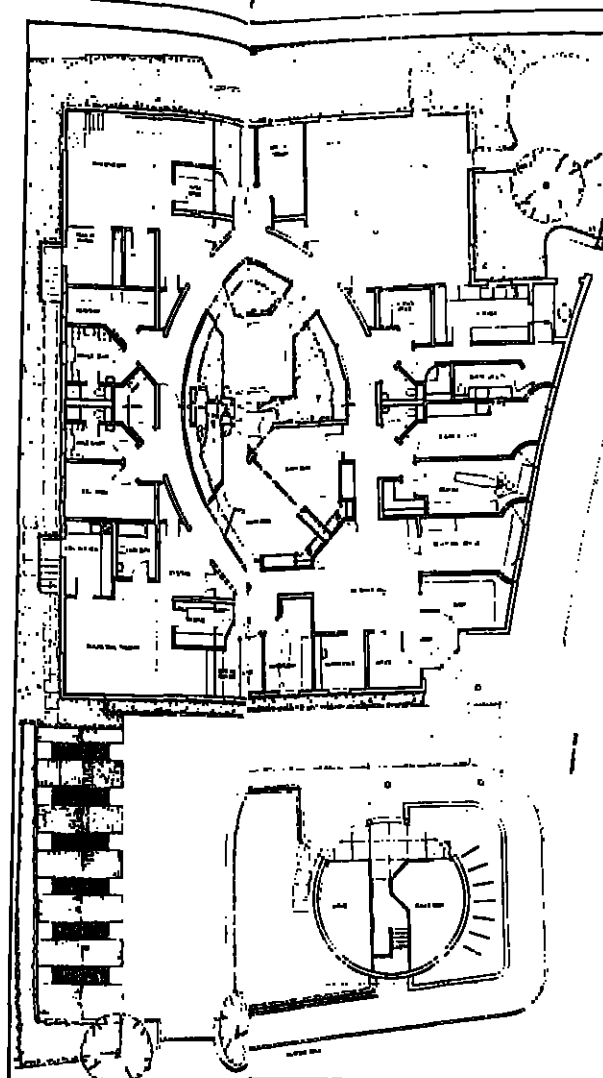
from page 24  
people wanted an alternative — as unlike the "hi-tech" of teaching hospitals as possible.

The centre was built on the site of the old Lambeth Hospital in Monkton Street and designed by Edward Cullinan Architects, who had no previous health building experience. This was unusual in a sector where most commissions go to the same group of experienced architects, but a new approach was required and the practice's reputation is based on that consideration.

The centre was intended to bring together many disciplines of health care — from GPs, to voluntary workers, local authority community nurses, therapists and social workers — in an environment which all would enjoy and feel able to work together in. Lambeth wanted a single-storey building but, says architect Robin Nicholson, "We wouldn't build single-storey in Lambeth. It wouldn't work in the street. We weren't prepared to compromise that even for the health service."

The architects undertook a long series of consultations to thrash out the details and to work out the relationship of various departments to one another. Such was their commitment that they submitted about 10 schemes over a two-year design period. The architects rejected the racetrack planning principle, because it produces a large number of small rooms and only a few large ones, in favour of a linear solution running along Monkton Street and turning inward to the tranquillity of a garden beyond.

While the scale of the centre is much smaller than a traditional hospital, in form it is far from "domestic". The red and yellow stock bricks of the ground floor give way to dry lightweight materials, steel frame and plasterboard partitions. The



Ground-floor plan of the Whittington Centre.

decision to cross-ventilate the four-bed wards meant that one roof rises over the opposite. At the centre the roof over the roof is made in a long, narrow, sloping porch at the front and a popular sun-room at the back.

The roof extends to allow for one of the most striking and unusual features — yellow translucent eaves which bathe the walls and paths in warm light. The facilities for the day patients are found on the ground floor, with offices facing onto the street and therapy and consultation rooms overlooking the garden. The commission period highlighted that it was unnecessary for patients to

The architects admit that the building was not cheap — they had to make a pro-rata reduction of 20 per cent to satisfy the DHSS quantity surveyor — but cost was never the prime consideration. The centre was, says Nicholson, only designed as a solution to that site and not as a formula and costing which could be applied over and over. "You would never," says Nicholson, "specify yellow eaves as a standard, and yet it has been one of the most successful elements."

The attitudes of the local people and patients are not the only evidence of the building's success. Cullinan was asked to design a day centre for the elderly, opened this summer. The Whittington Centre was proposed to maintain the health and rehabilitation of the borough's large elderly population and to keep down the number of people being put into institutions. The centre is jointly funded by the Company of Merchants — through its Whittington charity — and the trustees of St Thomas, and let at a peppercorn rent to the West Lambeth Health Authority.

The site at the junction of the Rufford and Polworth roads was picked for its accessibility and because it was large enough for all the departments to be catered for at ground level. Many of the inter-departmental relationships of the Lambeth centre have been maintained, but the arrangement has developed from a street to a square distorted on the Polworth Road border. The focus of the centre is a tranquil, eye-shaped court with seminar and staff facilities breaking into the circle. A glazed corridor rings this, giving access into each of the therapy and consultation rooms. There are few doors in this £25,000 centre, so people can mingle as much as possible, in keeping with facilities such as a hair-dresser's. The architects have also provided quiet, secluded areas for examinations and therapy.

Cullinan has drawn on some of the Monkton Street ideas and toned them down or developed them. The lay-by concept in the corridors where people can pass,

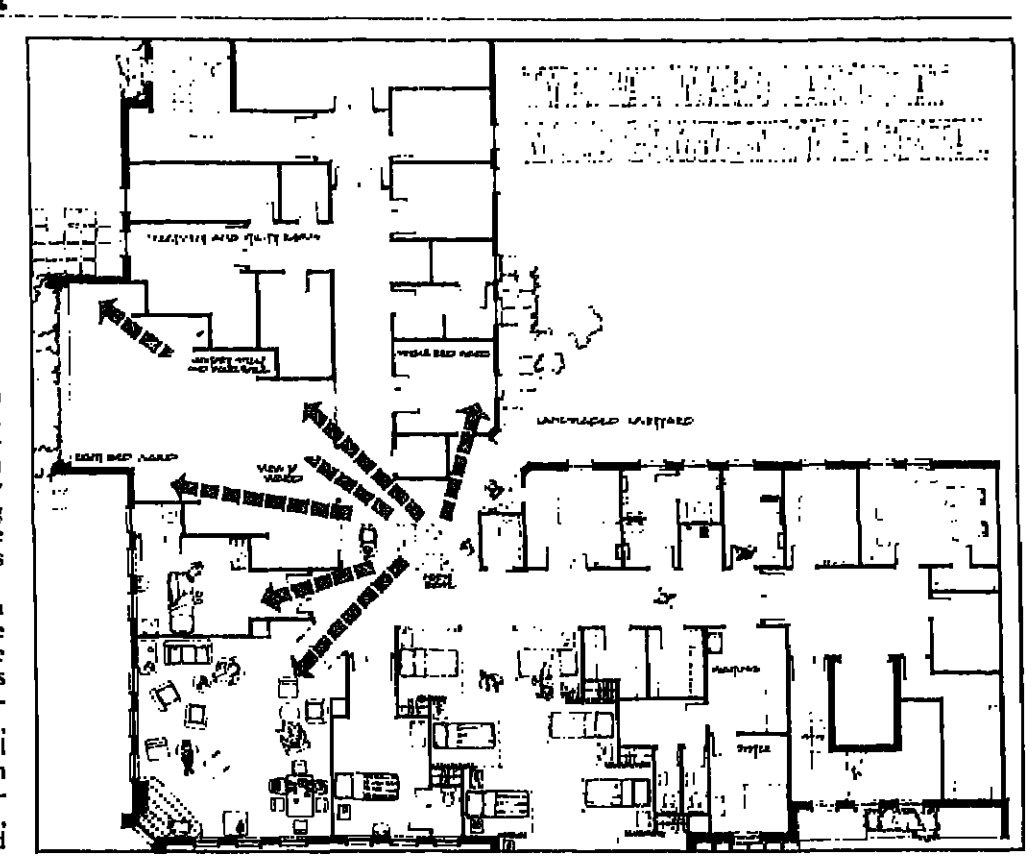
test of converse makes a second appearance. "The architecture of the Whittington Centre," says Nicholson, "is calmer than the Lambeth centre. It is less frenetic, the colour scheme is quieter."

A three-storey "lighthouse" for the caretaker marks the entrance and sets the style for the centre beyond — a stock brick-work wall with red-brick coursing and a flat roof with extended eaves lending a protective warmth to the development.

The approach of the Welsh health authority architects at Mold differs greatly from Cullinan's, but is held in just as high esteem by the DHSS. They strove to provide a building which in scale and appearance would be as reassuring as possible.

The new building lies on a small site in the grounds of the former cottage hospital. The original idea to refurbish this proved uneconomic. A single-storey structure of brick and tile, the Mold Community Hospital is at once unimposing, even inviting. The building is designed around two courtyards, allowing natural light and

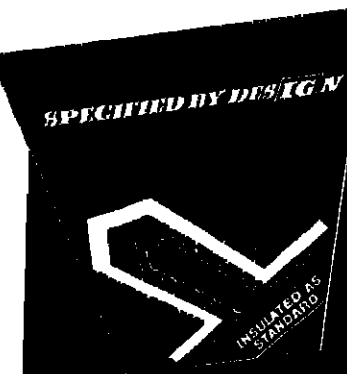
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Typical ward arrangement at Mold.

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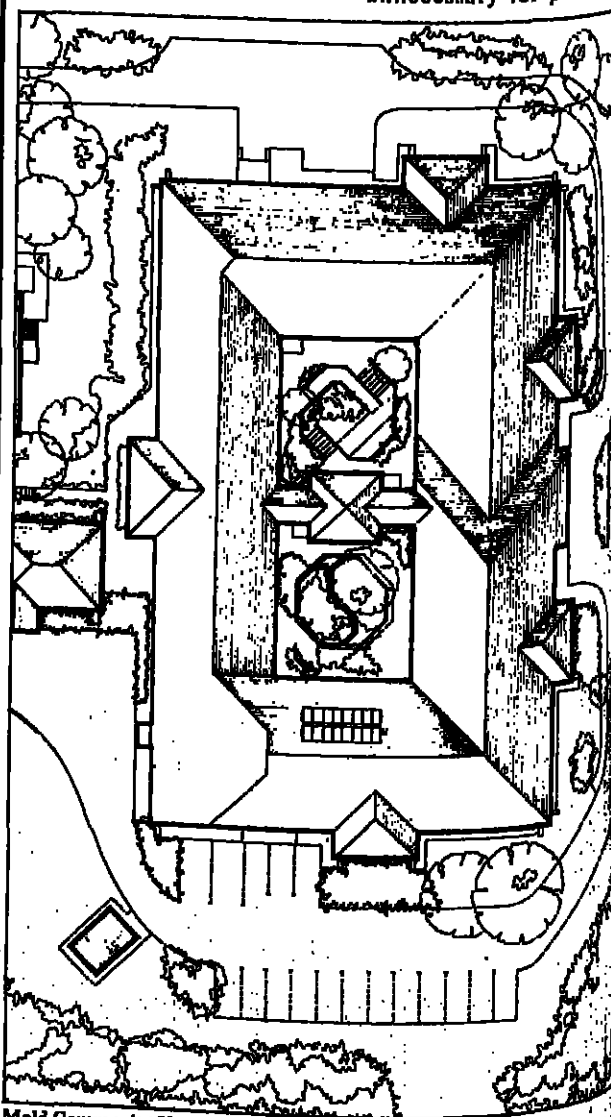
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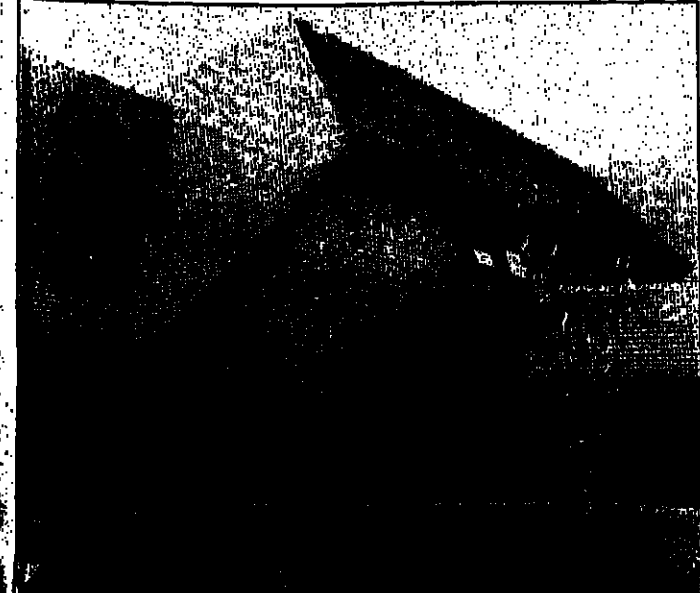
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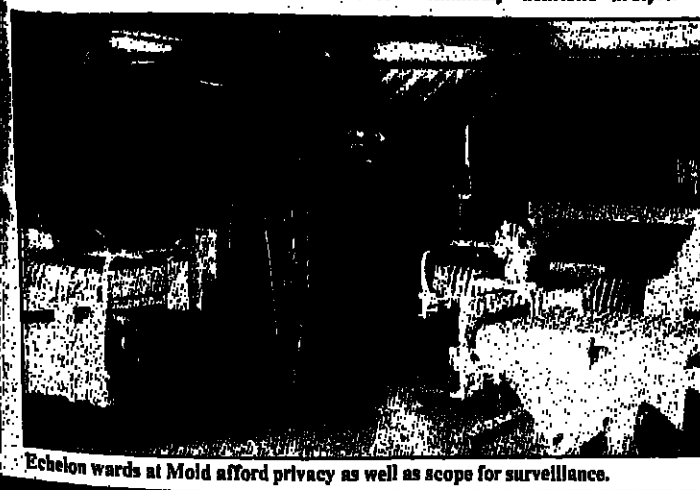
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Mold Community Hospital site plan.



The pitched roofing and brickwork at Mold is unashamedly "domestic" in style.



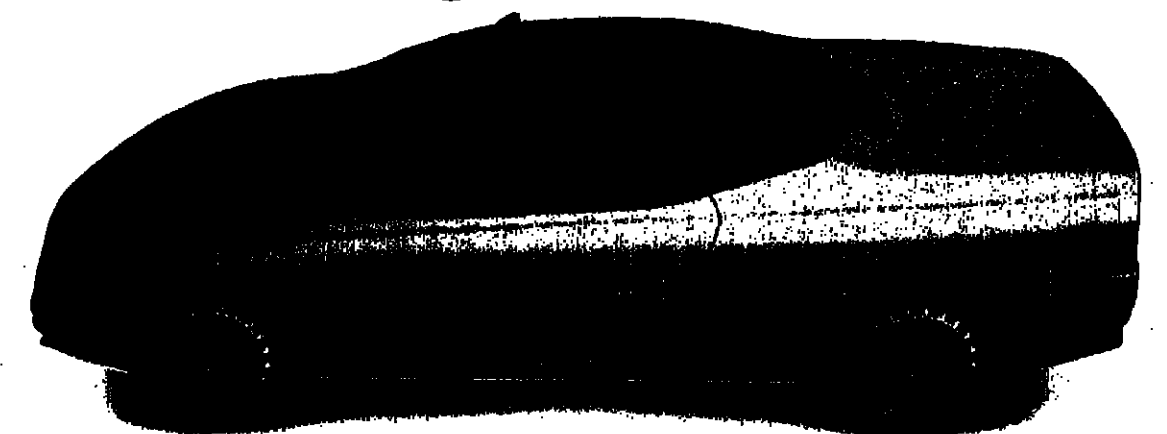
Echeion wards at Mold afford privacy as well as scope for surveillance.

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## District nursing

from page 27

ventilation to flood in.

The courtyards provide an incentive for patients and visitors to look inwards when the external view is unrewarding. Car parking needs made soft landscaping difficult, so flower-boxes have been incorporated wherever possible and planted areas raked up to sill levels to soften the edges of the development.

The architects were keen to produce something which was obviously of the community. The buff brickwork and red-tiled roof pick up on the styles of local buildings, and the apparent height of the new building is reduced by the diagonal bonding of the red brick coursing. The bays formed by the played buttresses at each corner of the building also seem to knock down its scale.

Inside the timber ceilings, facing brickwork walls, linoleum and quarry tiles all contrive to remove the institutional edge for people who would much rather be at home.

Only in the treatment rooms does floor vinyl prevail. Additional funding from the League of Friends meant that one of the courtyards could be developed as an informal physiotherapy area, a greenhouse and garden could be included to help rehabilitation and a hairdressing salon and pavilion give people an opportunity to meet and relax.

Clwyd Health Authority wanted the Welsh Health Technical Services Organisation architects to develop a new ward based on the Nightingale scheme of four-to-six-bed bays. The aim was to provide each patient with a mix of personal and surveyed space with as many beds as possible in the nurse's view. The wards were to be less regimented than traditional wards and to allow for men and women in one ward. The day rooms and ancillary areas were to be centralised to cut down on the distance nurses would have to travel.

The architects' solution was to produce two 20-bed units in

stepped wards of eight beds and four single bed wards clustered round the nurse base. From the console the duty nurses can keep an eye on 16 patients in the echelon wards while they have a side wall as well as the bed head wall creating an area of personal territory and privacy. The £1.3 million hospital has been a great success with local people since it opened in the beginning of 1984 and it has been awarded the 1986 National Eisteddfod gold medal for architecture.

The health authority architects followed up their success at Mold with a second community hospital at Ystradgynlais, north-east of Swansea. As at Mold, the facility allows patients to be treated by their own GPs and provides geriatric day care, occupational therapy, physiotherapy, X-ray, out-patients and casualty.

The hospital serves a catchment area of 16,000 people and is built on the site of an old tin plate works on the banks of the River Tawe. There are 30 consultant beds for the elderly, eight for the elderly mentally ill, 14 for local GPs' patients and a 20-bed day hospital. The architects have shown the same commitment to producing an inviting centre for care and social contact. The hospital is in a busy area of the town and the central community focus of the design allows in-patients, out-patients, visitors and staff to mingle freely.

The site is exposed and the architects have countered this by sinking the building into the slope on the north side which also serves to reduce its apparent scale. The use of large extended

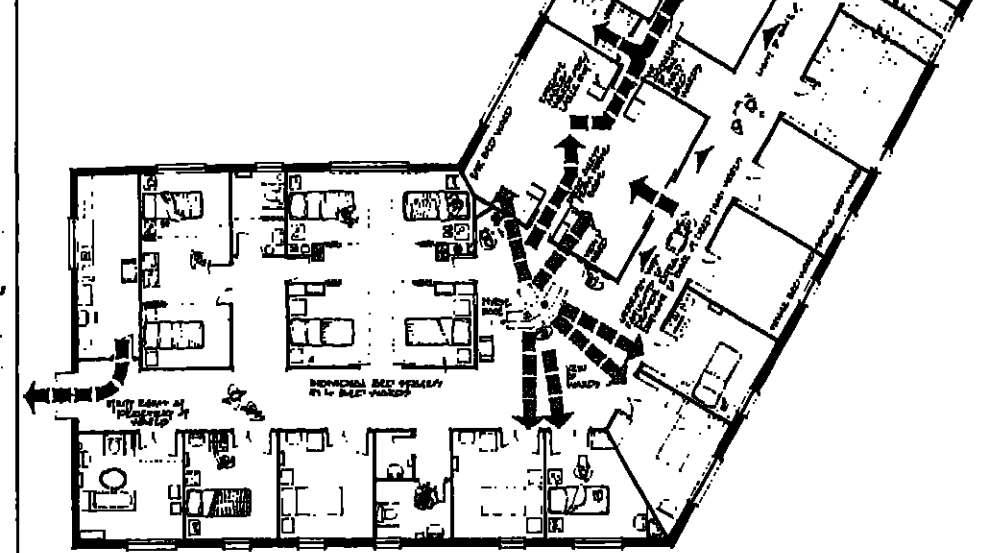
eaves, continuous sills, banded brickwork have the same effect and join the discrete units into one development. The eaves are the last of another important feature - Ystradgynlais - low tree-shade in the summer but solar gain in the winter. The use of mounds of subsoil protect against the wind, building into the landscape, also brought energy economy. The rooms which are used by patients during the day, been placed facing south, possible, with store rooms, north.

The five single-storey units were specified in the brief as a means of access and mobility for the elderly. The architect joined them in a house-shaped court faced by entrance and reception with option of a sixth wing if a room is needed. The design allows as much natural light and ventilation to be used as possible.

Again in the ward area, architects tried to achieve greatest surveillance - especially for staff working at night - while maintaining some privacy. The accommodation is made up of single, two-bed, four-bed wards. In the multi-wards wardrobes and cupboards are used to break down the space into more personal space.

The £2.8 million centre has been up and running for more than six months and is popular with users and staff alike, and people in need of intensive nursing care the long trek to the nearest district general hospital at Swansea.

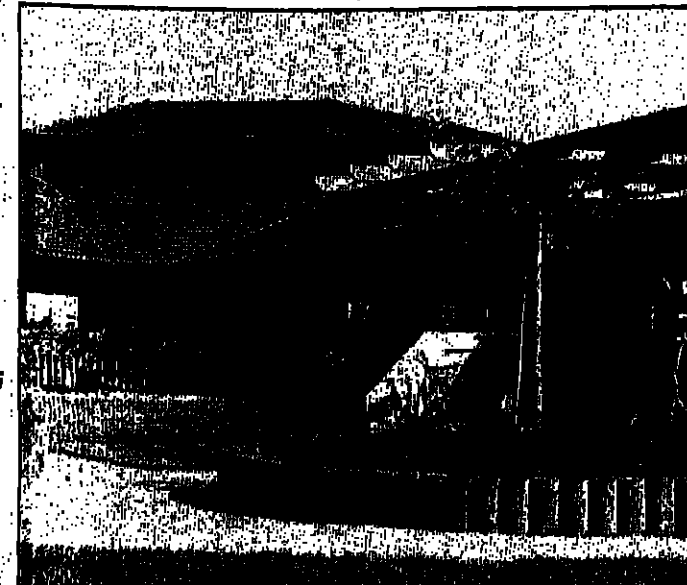
### TYPICAL WARD LAYOUT AT YSTRADGYNLAIS COMMUNITY HOSPITAL



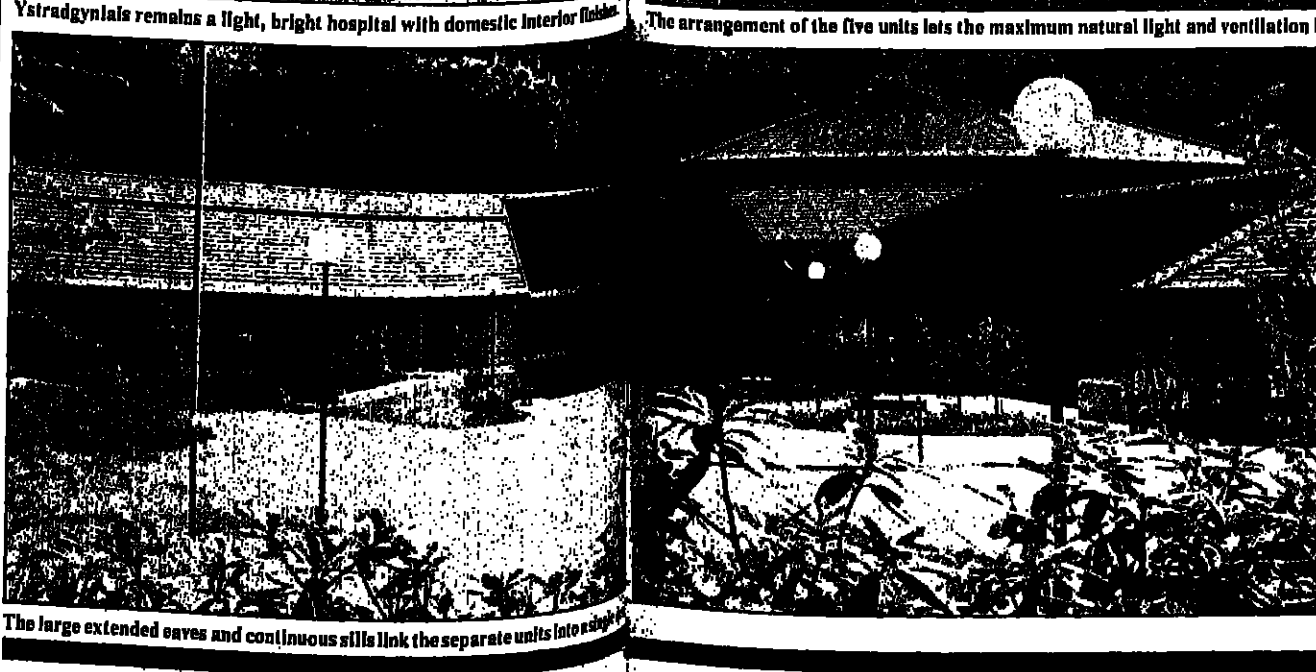
Typical ward layout at Ystradgynlais.



The architects have placed a lot of store by sensitive landscaping.



The arrangement of the five units lets the maximum natural light and ventilation in.



The large extended eaves and continuous sills link the separate units into a whole.

## Hospitals

### The costs behind the building figures

THE Government has announced four new hospital building contracts worth £75 million as part of its £3 billion commitment to construction in the health service. A £27 million plastic surgery and major trauma unit will be built at Selly Oak Hospital in Birmingham to replace the old accident hospital; an £8 million first phase redevelopment of St Mary's Hospital in Portsmouth is to go ahead; Phase IV of the Royal Cornwall Hospital at Tresliffe will be carried out at a cost of £11 million and the Halifax General Hospital will be redeveloped at a cost of more than £29 million.

The breakdown of the Government's hospital construction programme was given as follows by the Department of Health in a recent Parliamentary answer:

"Information held centrally on the 380 schemes in the programme, which totals almost £3,000 million, shows that 54 per cent are at the planning stage, 23 per cent are being designed and 23 per cent are under construction. Information on the 88 schemes currently under construction is set out in the table:

Year due for completion	Number of schemes	Estimated total cost (building and engineering works and estimated fees and equipment) (£ million)	Hospitals or 'phases of hospitals'	Smaller projects
1986	16	70	5	11
1987	50	289	23	27
1988	21	230	15	6
1989	—	—	—	—
1990	1	23	1	—

"New hospital developments are usually accomplished in phases. Detailed information on the anticipated dates for the start of construction of schemes at the planning and design stages is not held centrally, but is estimated that about 75 per cent of these schemes will start on site by 1990 and the remainder by 1994."

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Each unit has its own identity and the brick coursing marks the junctions between materials.

If the development on site 3C of the Docklands enterprise zone is meant to pay homage to the Olsen sheds across the red brick road — about all that was there when development started — then it must surely be deemed a failure.

But architects Hutchinson Partners Libby & Co were determined to create something which rose above that industrial anonymity, stylistically if not physically. And Skyline does hold its own against the vast shipping terminal although it does not match its height. And, with costs per square foot which have more than doubled in less than a year, the developer — John Laing Developments — must consider the project a success. "There are big grins on the faces of the developers," says architect Simon Powell, "the first units were selling in October at £90 per sq ft, now they are going for £200."

Skyline was meant to challenge. Faced with the horizontal imprisonment of the wasteland, water and opposing sheds, and with plans already afoot for the even more imposing elevated Docklands Light Railway, the designers of the small office units on site 3C had no wish to conform. The London Docklands Development Corporation's stipulation that the units should be owner/occupied to encourage stability in the area gave plenty of scope for a new approach. The concept of buying an office with a lease, in much the same way as one might buy a house, was unprecedented in this country.

Startling though the design is, it was not intended to be entirely radical, but was to combine traditional with modern materials in an unconventional compromise. The offices had to

impress the bank manager with their familiarity if the money was to be forthcoming.

Now new buildings are springing up from the Docklands mud at an astonishing rate but, as partner Max Hutchinson explains, when the suggestion of developing site 3C — as it is still referred to by the designers — was first mooted, there was very little to inspire. "Nobody believed in the place," says Hutchinson. "It was even before the red-brick road and there was little else but mud."

But like the legendary yellow street, the red bricks running round the Isle of Dogs have brought money and vision; the bleak sight which confronted Hutchinson is just a memory. "Everything was flat," says Hutchinson, "the sheds, the water and now the railway is another horizontal emphasis. The offices had to be an exciting, dynamic shape and create a striking silhouette to counter what was around."

The architects drew the essence of the Skyline from the vestiges of the working docks — cranes, boats, sails — to produce a fitting alternative for the eye. The elevated railway also meant that the scheme be conceived from a fifth plane of vision; the roofscape had to arrest the travellers speeding by. Skyline sits in one of the most critical locations of the enterprise zone, on the corner of the turning railway.

When Hutchinson Partners Libby & Co tendered for the land and the design, finally against three other architect/developer teams, models of owner/occupied offices and funding proved difficult to find.

Hutchinson admits that the practice's first scheme was wild — very colourful, with extreme pitch, greater height and an

apparent greater density. Although the LDDC took to the scheme in principle, it requested a few modifications to tone the project down a bit. "Our relationship with the LDDC," says Hutchinson, "was difficult but productive. They wanted to come to our offices and vet us, see what else we were up to. They

were pretty tough on us and gave us a real going over."

The architects came through the scrutiny unscathed, but the developer did not fare so well. The LDDC considered that for the purposes of this development it was not operating from a sound enough financial base. Rather than reject the whole

package, the LDDC retendered the site with Hutchinson Partners Libby & Co's design.

The second approved design was drawn up with the backing of John Laing Developments. The changes were drawn up with the help of LDDC architects Charles Attwood and Ted Holamby. Partner-in-charge Peter

Wallace recalls this as a time when their relationship with the LDDC was at its most positive. "The policy of the LDDC was a much more stringent, but creative process than planning permission seems to be. You're dealing with architects who can only tell you 'No, you cannot do so and so', but add 'perhaps you

could do this instead . . ."

On the edge of the enterprise zone, the site is bounded by large-scale Docklands buildings, post-war four- and five-storey council flats and the red-brick road on two sides. The offices lie beside the roads to reinforce the street pattern and are arranged in four discrete blocks to create a

The project responds to the docks environment.

courtyard of a domestic scale. Pedestrian access is available at each corner of the site with one vehicle entrance to the north. There is an ambivalence about this area which allows for parking, servicing, and pedestrian and vehicle movement.

The buildings vary from single- to four-storey and the

atmosphere varies as one goes up the building. The number of four-storey units was reduced in the second design. As the units were to be sold for occupation, the architects have taken pains to ensure each is self-contained and has its own identity. Although there are only two generic types, no two units are

Although each unit is separate, themes connect the whole scheme.

the same, and each has its own roof shape and visual break from its neighbours to express its individuality and generate a pride of ownership. Some are monopitch, some duopitch. Each front door is marked by its own "porch", concrete canon-ball and "cheese sandwich". The bank manager everyone

wishes to woo can see precisely where his money is going.

"The funding is coming from 37 different sources," says Wallace, "we thought we should talk an architectural language people are familiar with."

The units are not disjointed. A uniformity of image unites them. Brick coursing runs beneath the junctions of different materials — brick to glazing, glazing to cladding — to tie them together in one form.

The units, which range from 60sq m to 418sq m gross, have been taken up by a variety of professionals — chartered surveyors, interior designers and solicitors. There is something for everyone: the privacy of conventional offices, which could be found in any Georgian conversion, on the ground floor, larger open-plan areas above and mezzanines in more than half the units.

The changes are subtly reflected within. One's focus grows from the quiet domesticity of the courtyard at the ground floor to views of the rekindled docks beyond from the galleries above.

The brickwork gives way to red aluminium-framed windows, clustered and stepped, with hubs and spokes to provide windbracing, and cladding beyond.

A portfolio of local authority housing projects to inject security and colour ensured the practice felt confident about the combination of bright steelwork and bricks.

Hutchinson is relieved that the materials are now readily available. "We knew the combination worked and we were dedicated to it. Colour is very important to us."

The melange of materials is not, insists Wallace, something that one is likely to see springing

up all over the place. What is acceptable in an enterprise zone is not necessarily welcomed by planning committees elsewhere. "The design," says Wallace, "is a one-off solution to a one-off problem. All industrial buildings have a brick plinth, we just took that a bit further."

The junctions between materials did bring their own crop of problems; each had to be calculated individually since the angles were never the same twice and flushings had to be added to the gutterings to refine the unsightly industrial finish. But with demand which outstripped supply as soon as the first units went on to complete and the phased hand-over was cut back. The number of units was reduced from 41 as smaller units were merged to cope with demand for larger offices.

The architects would be the first to admit that the money — £3.8 million — was concentrated on the exterior architecture and the interiors were given only standard finishes, to allow occupiers to stamp their own identities.

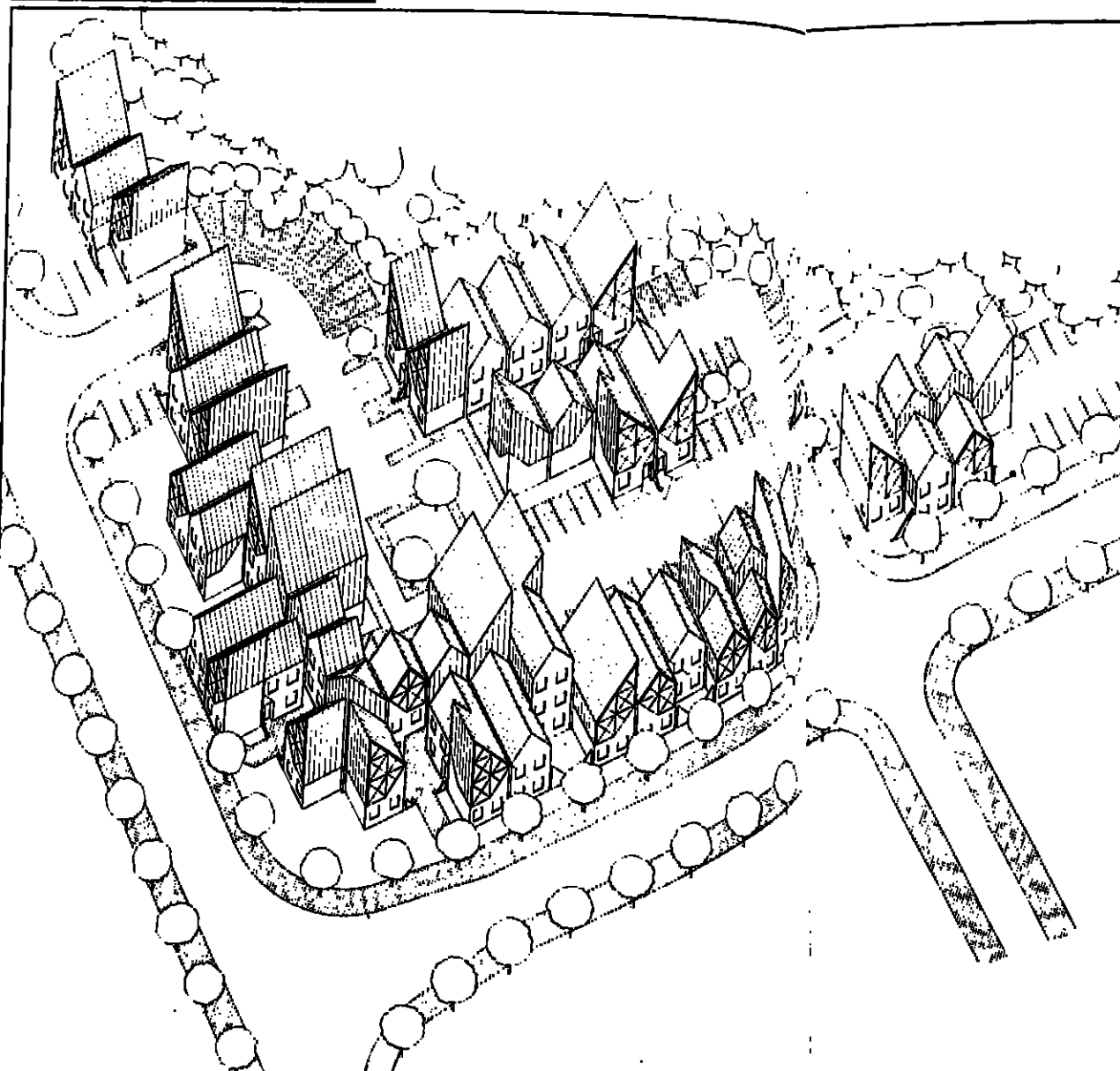
Most purchasers have adhered to the principle of buying and occupying, although one has been tempted by flourishing rentals to relet his five units. Hutchinson and company should never have worried about the site.

All the offices were sold within eight months and John Laing Developments is certainly not worrying now.

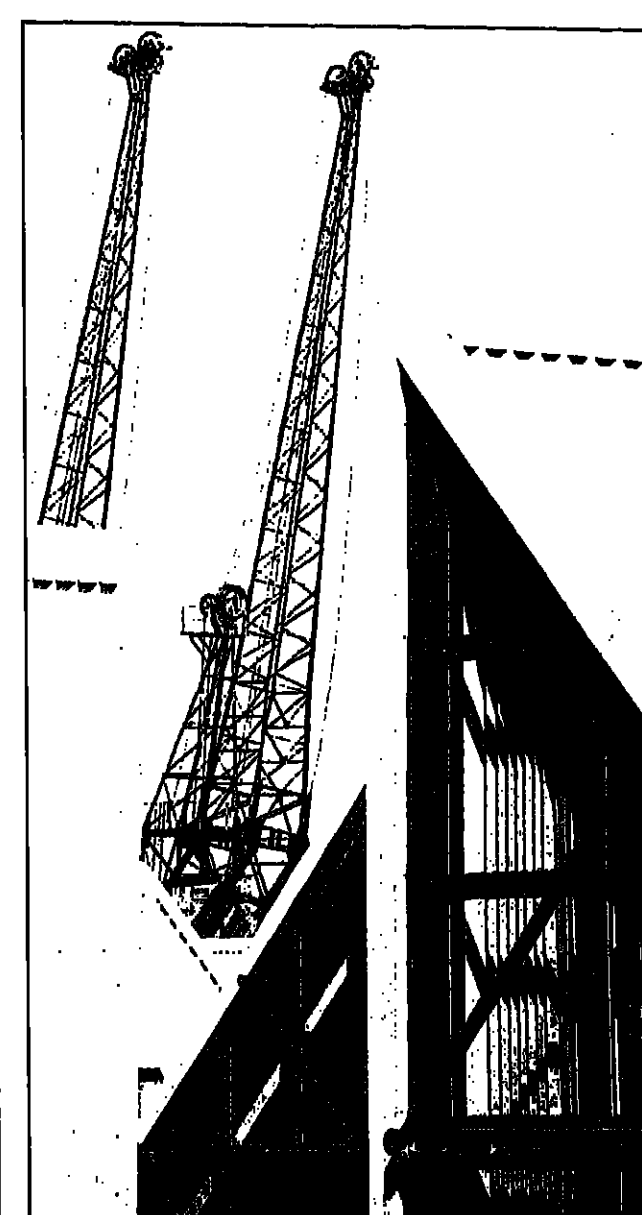
Architects: Hutchinson Partners Libby & Co. Clients: John Laing Developments. Quantity surveyors: David Bedford & Everett. Structural engineers: W A Fairhurst & Partners. Mechanical and electrical engineer: ACDP (Integrated Building Services).

Fiona Gorman reports on a startling development of office units in the London Docklands enterprise zone on the Isle of Dogs.

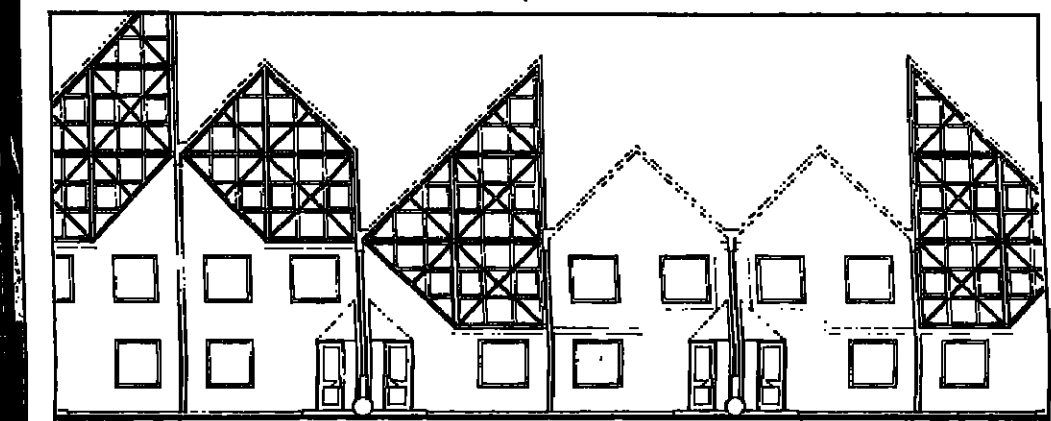
# SHARP CONTRAST



Axonometric of site 3C.



Skyline provides a striking contrast to the horizontal emphasis of the Docklands area.



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# Sculpture

## GARDEN FEATS

Tim Ostler on the architectural sculptures of Raf Fulcher.

RAF Fulcher's sculptures possess that sort of eccentric spirit so often described by journalists as "very English". Few contemporary sculptors demonstrate a more explicitly architectural quality in their work.

His installation "Garden Front", enclosing the rear courtyard of Jesmond station, Newcastle, as part of the "Art in the Metro" scheme, possesses more than a hint of the jester's hat about it; it produces much the same effect on this po-faced sub-Miesian station, figuratively, as a poke in the stomach might have had on Pope Innocent X.

Despite circumstantial involvement with architects at Jesmond, and a more direct collaboration with landscape architects at Liverpool Garden Festival Arena, Fulcher's is a spirit as yet oddly unexploited by the sort of classically-inclined architects in whom, automatically, we might presume an interest. Instead, his recent work has been confined to garden settings, such as the Chelsea Flower Show.

Before I met him, I'd expected something of an antiquary... aloof, patrician — the artist equivalent of Quinlan Terry, perhaps. Fulcher is in fact a small, gnome-like man, with a tendency to wear a sidelong, irreverent grin. It is his wife Elizabeth Tate — an artist specialising in exquisite equestrian sculptures — who possesses the aristocratic manner. They live, improbably, in a cottage *encl* near Gateshead, overlooking a wide industrial landscape (but just within sight of the sea).

Fulcher arrived at his interest in the picturesque by a rather

roundabout route. Graduating in 1968 from Newcastle University's Department of Fine Art, his first preoccupation was typical of the time: "What was I doing in the 60s dear?" he asks his wife. "I think you were making machines" she replies. But it was the poetic rather than the material aspects of technology in which his interest lay. Intrigued by the ideas behind it, he took part in a reconstruction of Vladimir Tatlin's "Flying Machine", picking up, he says, on Tatlin's perception that "people can fly in aeroplanes, but they haven't actually learned the feeling of flying".

Art about machines has become inextricably associated with Tinguely and his "useless machines". But Fulcher feels that these machines had more to do with the aggression of

technology. What Fulcher was contemplating was, instead, "a quiet sort of engineering". His machines were not intended as self-contained art objects, but as demonstrations of philosophical principles — or attitudes of mind. "The whole wobbly direction in which all that was leading," he says, in his curious turn of phrase, "was towards a vision of a new sociability brought on by non-antagonistic principles". It was the opposite of what he characterises as "percussive" machines, such as cars.

But before long technology lost its fascination for Fulcher. "What we were making then wasn't art, and it wasn't anything else. It was just a blind alley". Disillusioned, he stopped working for two or three years. His sculpture, when it returned, came as a direct reaction to his previous work and was the by-product of activities such as gathering, harvesting and aggregating. It usually took the form of primitive objects made out of dead materials and plant detritus.

Fulcher's work began to suggest connotations inherent in Rousseau's "Noble Savage". Primitivism became juxtaposed with the aristocracy. In a gallery installation appropriately called "County Life", ladies on horses were juxtaposed with vegetation mounted on frames mounted off the floor, and fragments of Chinese pottery.

Fulcher became interested in a more ordered form of nature, and thus to the idea of the garden — to a more traditionally English approach to the picturesque. But at the same time this was combined with an ideal Platonic vision of posts and lintels, of the primitive hut — "Adam's House in Paradise".

Between these two approaches to the natural world Fulcher feels there is a "very wobbly" connection (Fulcher's usage of the word *wobbly* denotes an idea which is vague, half-baked, not fully thought-through; but perhaps for that reason still open-ended in its implications). The result is perhaps whimsical, but the artist, for his part, prefers the term "lightness", on the principle that some of the strongest ways to say things are slightly off the cuff.

Fulcher's interest in historical reconstruction, dating from his work on Tatlin, and his new interest in the picturesque, resulted in the V&A giving him a job of constructing replicas for their exhibition of Humphrey Repton's work.

Raf Fulcher and Elizabeth Tate are two genuine architectural *naifs*. The clash between the one's quirky Batty Langley approach to classicism is balanced by the other's more aristocratic manner. There are no architects of this century of whom they are particularly

aware or admiring. They are both, however, enthusiastic about Vanbrugh, particularly his work at Castle Howard and Seaton Delaval. Fulcher becomes quite animated when talking on the subject. "Because Seaton Delaval burnt out the way it is, I almost feel as though you're looking at a Vanbrugh drawing; you're looking at the realisation of the whole thing... you're much more aware of the basic concept." A similar fascination: produced by Blenheim Palace: bombastic outhouses, who baubles, ties, swags and fluted possess the rhythm of ballistics juggled exuberantly in the air.

It was as part of Northern Arts' enterprising scheme "Art in the Metro" that Fulcher was asked to carry out what proved to be his most architectural work yet, at Jesmond Metro station in Newcastle. Here a quaint arch form, a Millstone grit forms a central feature between copper-finished obelisks planted in timber boxes like exquisite topiary. The composition is set between two wings at the back of a sub-Miesian glass box; through it commuters can see a large patch of closely-mown municipal grass.

In its context, the sculpture provides the architectural decor for which the architect seems to have abdicated all responsibility (according to Fulcher, they showed little interest in his proposals). He cites no particular prototype for this work, except to a certain extent 18th century Delft china painting.

We might be forgiven a yawn at the mention of public sculpture; much of it at present is unloved and uncared for anyway. For Fulcher, however, it is intentional that "Garden Front" should achieve a derelict, ruined quality. What he regrets is that the minimal budget of £1,750 prevented him from using materials likely to weather gracefully enough.

For instance, he was unable to use thick, vandal-resistant copper. Instead he used 22g metal on rot-proof plywood backing. The decorative finials are repoussé copper filled with grout, but Fulcher has learned the hard way precisely what diameter the steel bars that connect them to the obelisks should have been. At the time of my visit, local vandals had already set them at a drunken angle.

"Garden Front" hasn't attracted the kind of hostile press reaction so often suffered by public sculpture. In fact, it's hardly attracted any attention at all. That so many commuters pass by without a second glance could be because, like one man



Reconstruction of Tatlin's "Flying Machine", c1970.

Fulcher's "Unacceptable Objects", seem to have abdicated all responsibility (according to Fulcher, they showed little interest in his proposals). He cites no particular prototype for this work, except to a certain extent 18th century Delft china painting.

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Overall view of the setting at Chelsea.

Fulcher spoke to, many are under the impression that it's "a bit of Old Newcastle". In other words, if artists can convince people that what they've done isn't art, but a link with the past, they can expect a far more sympathetic reception.

Another work for an architectural site was at the Liverpool Garden Festival Arena, a collaboration with both Tate and George Carter (a sculptor working as exhibitions designer at the Sainsbury Centre). It is a job without happy associations for Fulcher, as the building was not in the end carried out according to the design for which his sculptures were created.

In particular, although he intended his sculptures to be lit from the sky, a tensile roof was added at the last moment. Not only were his sculptures now lit from below, but it was also necessary to wrap their sharp ends in old socks to prevent damage to the roof membrane.

The piece for Chelsea, collaboration with Tate, Carter and Caroline Boisset, was a far happier experience. Fulcher describes it as "our consolation prize for Liverpool".

Called "Illusion & Perspective in a Small Town Garden", the idea was hatched during the Liverpool project, during discussions with Caroline Boisset, a friend who was a member of the Royal Horticultural Society. The four of them realised that to take a stand at Chelsea would be a far more effective way of getting their work across to a large audience than to exhibit in an art gallery. As Carter points out, "In four days, you see 250,000 people".

The original plan was Carter's; but as the project went on, each artist tended to concentrate on certain elements: Fulcher working largely on the cross axis, Carter on the central axis, Tate on the central water feature, and Boisset taking charge of the planting.

The team had the kind of polemical aim as yet unfamiliar to the world of Percy Thrower and Harry Wheatcroft. The ideas they intended to promote were the antithesis of the rest of Chelsea, with its "woolly thoughts, wiggly lines, bright colours, and kitsch jumble". The intention was to return to the values of an earlier age of horticulture, breaking the feedback loop of taste gripping the mass market. It is rather as if Leon Krier were to rent a stand at the Ideal Home exhibition.

The modern materials deployed by the artists in order to achieve this aim were intended to paraphrase those used in gardens of the late 17th century. Behind cockle shell footlights, rusticated architectural piers built of coarse shuttering ply marked out the boundaries of the theatrical setting. A grotto

# Sculpture

glass were edged with lead sheet cut in a zig-zag pattern. Timber, wherever used, was stained in one of two shades of green, giving it an algae-like patina.

Tate's water piece at the crossing of the axes was a cross between a pool, a sundial, and something by Jan Hamilton Finlay. A circle of stone was inscribed with a flame/wave motif, and the words "quick", "silver", "waves" and "flames".

It could be rotated manually by means of a small silvered glass ball on a pole: "It's not really a pool, it's a sculpture", says Tate, "a stone puddle".

The planting used was kept deliberately simple in order to demonstrate the ease with which this sort of garden can be achieved in an ordinary urban garden. English yew hedges, encased in trellis, framed the plan, with yew and box topiary specimens in cone, ball and pyramid shapes dotted around the composition (the plants they used, I learned, were specially bred for exhibition and frequent transplantation. Like prize poodles, they are kept clipped and maintained, with restricted root balls). Foliage, however,

was cleverly selected to match precisely the two shades of wood stain used.

In their comments, some visitors focused on the gloomy (Tate prefers the word "contemplative") atmosphere. "It's like a mausoleum, it's Mexican, ... a garden built by weirdos for weirdos".

But the popular reaction to the display was markedly favourable. This attitude was more than counterbalanced by visitors delighted to see "this sort of thing at Chelsea at last". American visitors, for some reason, seemed particularly sympathetic. The garden won one of the Silver Gilt awards.

It must now be fairly widely established that one of the main barriers to collaboration between artists and architects is a lack of common preoccupations. Art and architecture remain divided by a no-man's land. Fulcher, along with his fellow artists Tate, Carter and Boisset, retains an artist's sensitivity to materials. But his work at Newcastle, Liverpool and Chelsea demonstrates that he has already made it more than half way across the barbed wire.

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THE, once universal dominance of British capitalism has shrunk in the late 20th century to just one sector: so-called "financial services" — banking, investment, insurance — based in the City of London and some ex-imperial outposts.

Their "invisible exports" are one of the only two business sectors (the other is North Sea oil) that consistently return a positive foreign trade balance, and together they have underpinned the stability of the present Conservative Government.

It is no accident that this sector has been the commissioner of the two most significant British architectural projects of this decade: the headquarters of the Hongkong & Shanghai Bank from Foster Associates, and the new Lloyd's insurance market from Richard Rogers.

What may be more difficult to explain is why these commissioners have chosen to represent themselves in forms derived from the industrial manufacturing culture which has so conspicuously failed to flourish lately in these islands, and whose decline some have attributed precisely to the indifference towards it of City investment institutions.

Actually the decline of manufacturing and the growth of "services" in the British economy may be said to find in Lloyd's new building an at least metaphorical representation. For the new building, quite apart from looking to many eyes like an oil rig or refinery, is itself about nothing if not "servicing". Its design may be said to represent the triumph of servicing over material substance, process over finality of form, behaviour over object, performance over style. Moreover, we might go further and characterise this building for an insurance institution as itself an elaborate and comprehensive piece of architectural insurance. However, I say "represent".

deliberately, for that is exactly what this building is — a representation, not the actuality, of that mechanical triumph: a rhetorical image derived from the exaggerated and Baroque display of selected mechanical and structural features.

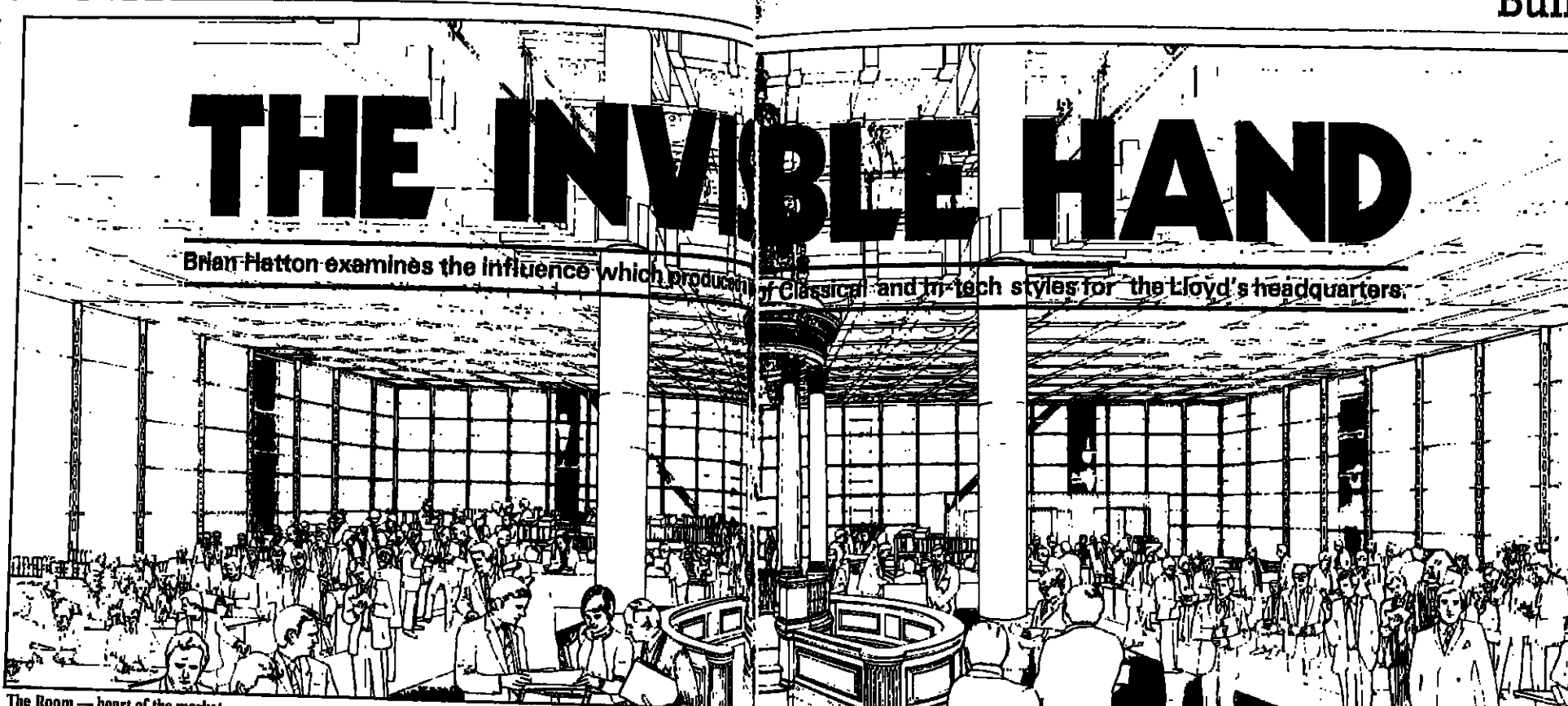
Yet the servicing and "insurance" given to its occupants is very real, and a true response to the brief. Lloyd's is not a corporate headquarters but a phenomenally successful private marketplace that has outgrown its housing three times in this century. Taking its name from the coffee shop in which it began in the late 17th century, Lloyd's moved in the 19th century to Cockerell's Royal Exchange and then in 1928 to a new building on the present site. In 1958 it relocated to larger premises next door, but by the 1970s it was again requiring more space for its transactions, which have always taken place within a single floor known as the "Room". Also impinging was the pressure of new information technology, whose electronic facilities could no longer be incorporated piecemeal and empirically.

The directors now looked for a definitive solution to their accommodation problem in order to ensure that they would never again outgrow their quarters or be outgrown by their technology. This prospectus of predictable growth and prudential change on a single site was the first datum in the production of the new building. The second was the character of Lloyd's operations. Lloyd's is a shop, but it is a closed shop in which both sellers and buyers are members of an exclusive and traditional club based on face-to-face dealing where "my word is my bond". It might be described as a department store of insurance services in which brokers shop around on behalf of clients in the world outside to buy risk cover from syndicates of underwriters, who form the essential membership of Lloyd's. Lloyd's confederal or-

ganisation is cellular, like many advanced architectural structures: if one syndicate fails, the rest of the structure is unaffected.

Given these requirements on the restricted site of the 1928 building in the City's medieval street-plan (an archaeological dig is underway next door), certain features of the new building were fairly predictable: a great hall, height, perhaps even the atrium form. Given also the current urbanist climate, its engagement with the life of the street, public invitation, and expressive articulation could also have been foreseen. But whether any of the rest of the appearance of this design could have been deduced as a strict outcome of necessity is, to say the least, moot.

Yet the ideology of the kind of technological rationalism found in this building gains much of its appeal, indeed charisma, on claims to find by means of fine analysis of functional criteria into technical specification, the optimal solutions to defined problems. Whether this strategy can be extended to architecture from the fields of instrumentation and advanced engineering



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#### Civic Shield gets the "thumbs up" from Wales and West.

Of the 3,000 or so dwellings owned by Wales and West Housing Association, the 36 flats and 10 houses at Ynysybwl, near Pontypridd, were a cause for concern.

The severe weather conditions in this Welsh valley had made the mould and condensation problems even worse.

So it was these 46 dwellings which Wales and West chose as their pilot scheme for adopting the Electricity Board's Civic Shield Award.

As is usual with this scheme, the work involved minimum fuss and disturbance so it wasn't necessary for the tenants to be moved out.

In just two months, from January to March 1983, all 46 homes had been upgraded to the Electricity Board's Civic Shield Award standards.

By converting the homes to the Economy 7 tariff, improving the insulation, installing new style heaters and converting the water



heating to Economy 7, they became warm and comfortable with affordable running costs — plus very happy tenants and an ecstatic housing manager into the bargain.

Consequently Wales and West actually found themselves faced with a waiting list for homes which had previously been as hard to let as they were to heat!

Their pleasure at the cost-effectiveness of the whole package — from installation right through

to operation — speaks for itself. In 1985, all Wales and West's 800 dwellings in the South Wales Electricity Board area had been upgraded in accordance with DEN 3 guidelines and had received the Civic Shield Award.

In fact, they have now completed the upgrading of all their electrically heated homes.

As usual, the homes weren't the only things we converted!

#### Now these tenants are the envy of all their friends and relations.

After hearing about Civic Shield's success from the South Wales District Energy Marketing Engineer, Monmouth District Council decided to install an Economy 7 heating package in one of their biggest problem areas — pre-fabricated homes with no proper heating system at all.

The homes were freezing and, like most buildings of this type, there was the added problem in that the thin concrete external walls required extensive repair.

The Civic Shield Award Scheme, with its comprehensive insulation package and Economy 7 heating and hot water, was the ideal solution.

The lofts were insulated and draught-proofing was fitted round doors and windows. And lining the inner surface of the walls with insulation board not only overcame the problem of heat loss, it also covered up the repairs.

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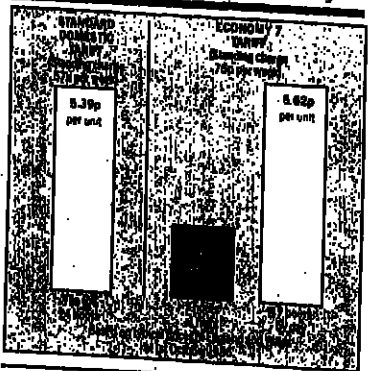
It's our "How to do it" adaptation of the original Domestic Energy Notes (3) — DEN 3 for short — prepared in



Economy 7 period, and the efficient insulation enables it to be stored. The heaters then give out heat gradually throughout the day, to keep the homes comfortable and warm.

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Tenants are able to get cheap heating because the stylish new slimline storage heaters take in heat overnight during the cheap

1978 by the Joint Working Party on Heating and Energy Conservation in Public Sector Housing, for remedial work for existing electrically heated dwellings.

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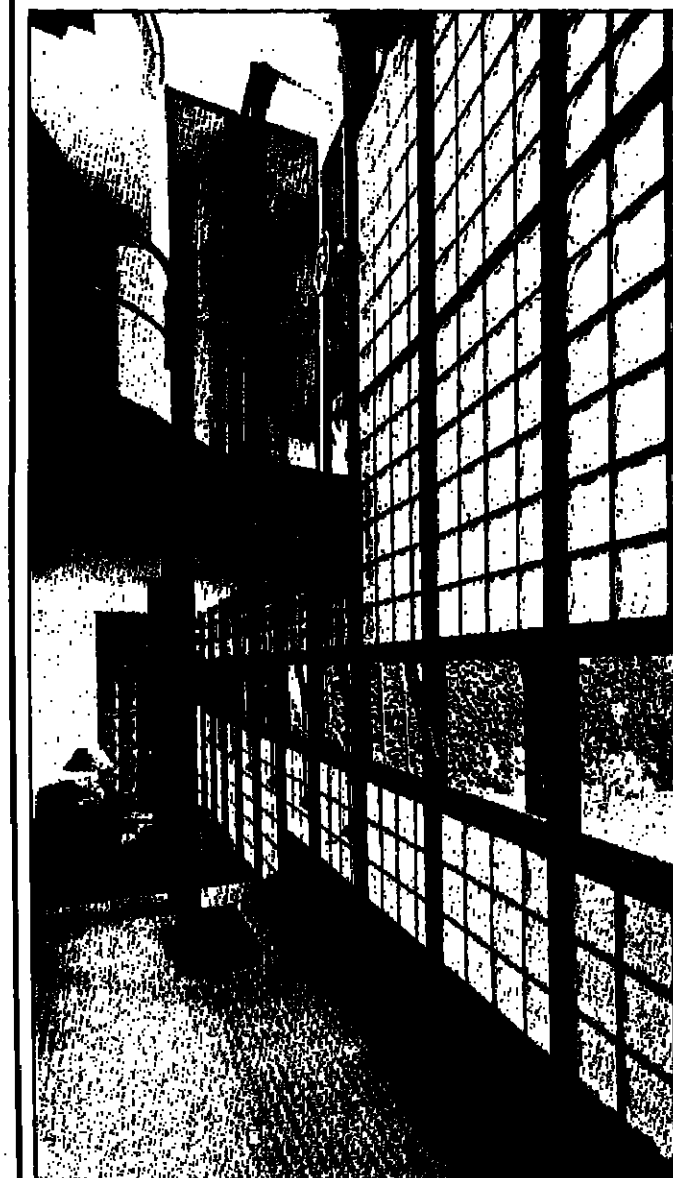
## HEATELECTRIC

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#### CASE HISTORY: MONMOUTH



Chateau's Maison de Verre — inspiration for a glazed wall of light.

glazed by an array of objects and parts that are indeed brilliant solutions to problems, but often problems arising from assumptions which are unadmitted, unexamined, ideological, and perhaps unconscious.

The failure to negotiate, representationally, with the unconscious, the failure to admit certain obsessions and conflicts between the ideologies of architecture and of business, leads to an irresolution and instability of image which is rife in the exterior of the new building, but most tellingly revealed high up out of public sight in the directors' rooms and boardroom. Here, the intimate surroundings of the directorate have at their heart a reinstallation of the entire Adam boardroom (originally in Bowdoin House) from the old building, together with period furniture.

This preservation, like a beautiful casket in a hi-tech frame, might be accounted simply a sentimental attachment to an institutional heirloom, the private equivalent to the public preservation of Sir Edwin Cooper's 1928 Classical entrance at street level. Moreover, Adam's domestication and merchandising of Roman archeology by means of interchangeable moulds (they are still available from a London interiors firm) was an early antecedent of the techniques of prefabrication and replace-

ability which predicate the new Lloyd's building. Yet the Adam room is still used, for preference, by the board, and the rest of the floor on which it stands has been given over to the kitsch embellishments — grp Doric columns and quilted doors — of the French interior decorator Jacques Granges.

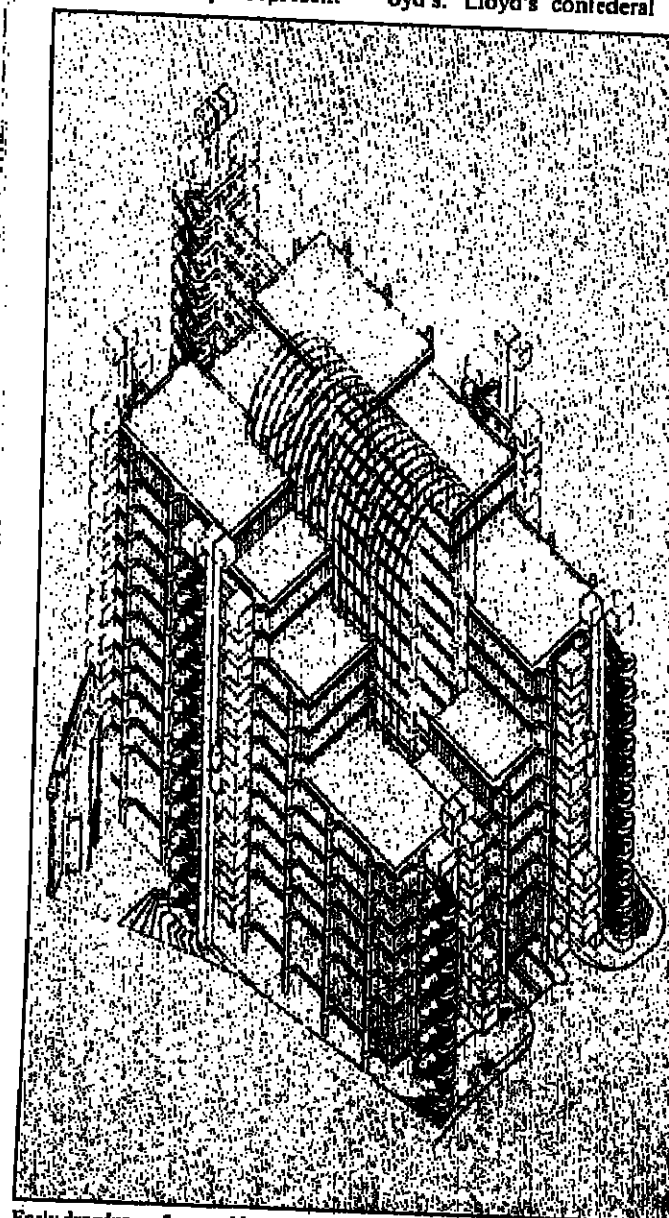
The retention of these Classical pretensions by Lloyd's in the midst of their new environment cannot be simply dismissed as marginal or merely a "failure of nerve" on the commissioners' part. It represents an implicit assumption that although work may be done and money made in the surroundings of servicing-

modernism, its fruits and the good life are still ideally consumed in the traditional forms of aristocratic Classicism, feudalism, and handicrafts. To the extent that intimacy and luxury are still perceived in these terms, then the kitsch and Classical trappings of the executive rooms constitutes a subversive criticism of the rest of the building below them.

It is claimed that the kind of architecture found in the new Lloyd's is precisely about honesty, frankness, visibility, and control. But these categories are made to apply here only to mechanical matters. In fact, there are many things in this building which are not admitted, not visible, which are repressed, and ultimately indeed in some places out of control. If the executive heart of the building finally pretends to a fake Classicism (and in saying this I am referring to the whole building that Lloyd's commissioned for themselves, not the nine tenths of it designed by the Rogers partnership), its public exterior breaks out into a blustering, Baroque functionalism barely this side of mechanolatry in its psychological effect.

For the public it will look like a machine, exciting by its movement, and dissolving at night, as Mendelssohn was the first to grasp and exploit, into pure optical energy, like Lewis Carroll's Cheshire Cat that disappears into air, leaving behind only its grin. But it will also at other times and other levels, perhaps barely sensed, and distracting and disturbing, resemble something other. I myself find it hard, contemplating its southern aspect, to put out of my mind the hallucinatory image of the machine-become-Moloch in Lang Meieropolis. When I say "out of control" I am speaking of architecture and its domain of representations, as in the towers containing servicing plant, that have clearly got much bigger than anticipated in early projections. In technical terms, I do

continued page 38



Early drawing — lower add-ons.

For more information on DEN 3 and Civic Shield, call your Electricity Board contact below.  
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## The invisible hand

from page 35  
not doubt that Lloyd's have got their insurance policy for the future, and it works.

The rationale of its workings is broadly as follows: just as Lloyd's is a confederal infrastructure, so their building is basically a concrete megastructure, a 12-storey shelving stack designed to carry facilities which have, due to obsolescence and wear, a range of shelf-lives; from short-term (computing), through longer-term (lifts, toilet chambers), to very long-term (the Adm boardroom). In order to enable easy replacement of these components, which comprise a prefabricated kit of parts, Louis Kahn's distinction between "served" and "servant" spaces is intensively and comprehensively developed.

But there is a profound difference between the display of services on the exterior, where their vertical distribution is exuberantly manifested in a display of ducts, cranes, lifts, pods, and articulations, and

their concealment in the interior, where their horizontal distribution across each level uses above ceilings and beneath floors. This endows the interior with a particularly fine realisation of the spacious and light, if somewhat lobotomised, serenity typical of international business minimalism.

The unity of the interior space is impressed upon the visitor immediately on entering the Room on the principal floor, which is raised slightly above street level to allow a half-basement to accommodate more public activities and access, with coffee house, restaurant, conference theatre and reception. The Room itself is double-storey height and bounded by a triple-glazed "wall of light" of frosted prisms inspired by Chareau's Maison de Verre, and fulfils Corbusier's dream at Centrosoyuz of a "breathing building" by ducting within its layers the air extracted from the interior.

The insulation afforded by these walls, together with the

computer-controlled 24-hour environmental regime make the building, it is claimed, 55 per cent more energy efficient than average British offices. One of the principal means of this control is the ceiling grid of "roses" — circular fixtures like inverted saucers that compact into a single point local down-lighters, sprinklers, and air extracts. These roses are among the most finely tuned objects in the building, and atop their virtual "columns" of directed lights, they constitute the nearest thing to an "order" in the design of this building.

Light, coming naturally from the walls and artificially from the ceiling spots, is the principal ornament of the interior because the trading floors have been cleared of structural impediments. Vertical supports are banished to the exterior of the wall, and all stairs, lifts, toilets, vertical ducts, and ancillary conferring rooms removed to satellite service towers outside the periphery of the main space. The dramatic corner

locations of these towers lend a picturesque quality to the building's elevations from the street, but in fact the combination of a rational, orthogonal interior enveloped in an irregular, medievalised exterior finds its true precedent in those 18th century castellated stately homes, such as Robert Adam's Culzean Castle, which preceded the true picturesque movement of free planning in England.

It is these aristocratic mansions, and not the Victorian public realm of Street's Law Courts, to which Rogers has pointed in his talks on Lloyd's, that are the true model here, at least where "Gothic" comparisons are concerned, for the exterior. In the interior, on the other hand, the "Gothic" comparison (if one is going to make these rather far-fetched parallels) which Rogers implies in speaking of the "cathedral window" of the atrium, is clear: it is with the Perpendicular style, the "Merchants" (ie businessmen's) Gothic, whose boxy glass chapels spread over England in the 15th century. But to my eyes the historical styles most suggested by the new Lloyd's building are those from

the age of its founders at the end of the 17th century.

If the interior catches a hint of the four-square lucidity of Wren's City churches, with the mezzanines around the atrium above the principal floor of the Room like the galleries above the side-aisles requisite in English churches, then the exterior recapitulates in the image of the machine the gawky, top-heavy and banana-fingered baroque, all oversize quoins, banded rustications, chimney-pots and bulls-eye windows of Hawksmoor and Vanbrugh. Suggestions of this period are encouraged by the reinstallation at the centre of the Room, like a protestant pulpit, of the old Classical rostrum that carries the Lutine bell, which is traditionally rung to announce disasters or great events.

In fact, electronic facilities for communication and data processing are spread integrally and invisibly throughout the building. The point where these surface and manifest themselves tectonically is at each syndicate's workstation, or "box", as it is traditionally known. User-participation in the design at Lloyd's is nowhere more evident (the Committee rooms excepted) than in these "boxes", which at the underwriters' insistence were constructed of hardwood in the traditional format of stiff-backed pews facing each other across a long table.

The trading-floor of the Room at Lloyd's is no stock market burling; transactions are carried out in an atmosphere of calm across these benches, which also lend to the Room a faintly ecclesiastical or collegial air. Nevertheless, the boxes are in fact threaded with services distributed through the raised computer floor — vdu cabling, telephones, power, and individual air-conditioning.

The underwriter at his box works close to his desk, but if he looks up he sees the principal architectural gift of this interior to its occupants — the immense well of light and space of the atrium, which rises past escalators and mezzanines (eventually all 12 floors may be mezzanines). At present the upper levels are filled with subtle office capsules which can be taken out as the market expands (to culminate in a glass barrel-vault 93 metres above the floor of the Room). This atrium is not a private public space of the now common hotel lobby kind, but is the perquisite of the underwriters themselves, and inspired, surely, like so many other features in this building, by Wright's Larkin offices.

It may be submitted that the great historical model here is the 1851 Crystal Palace. This is true on two counts. First, in respect of using advanced methods of prefabricating lightweight components to create a transparent framework, and secondly, in that here too there is an exhibition of temporary or mobile things within the permanent framework. But the "exhibition" model here is that of goods on sale in a supermarket.

And while both Lloyd's and the Crystal Palace echoed ecclesiastical models (the Crystal Palace had a long nave with a central transept like an English cathedral) the simplicity and public unity of the Crystal Palace is utterly lost in the mass of exterior servicing at Lloyd's. It is only those on the interior who get to experience its light and space. Upward movement is dramatised and designed to bring to the underwriter's day a brush with the sublime. He can choose to rise through the building by vaulting the atrium on the escalators; or he may go to the service towers and, taking the glass-framed lifts which look out onto the street, contemplate

the City's ocean of roofs as he rises.

The whole functional effort of this building is dedicated to the untroubled servicing of the underwriter at his box as he calculates the fine divisions of risk into premiums and costs. Catastrophe and calamity are calculated in terms of digits and decimal points in an atmosphere undisturbed by discomfort or distraction. It is here that the functionalist philosophy of design must fulfill itself with the same impalpable permeation as fresh air and permanent dependability as insurance itself — you don't see it, hear it, smell it, but you know it's there. In the main, the interior of Lloyd's achieves this serendipity of "silent running", here, the Modernist project of making ideal space coincident with literal space is all but achieved.

But this serendipity is literally swathed in irony on the exterior of the building, where every device of its maintenance is put on raucous display. It's as if the

architects had decided to build a representation of the 2nd Law of Thermodynamics, which says that in creating an enclave of order you inevitably increase the disorder — the entropy — around it. Insofar as the exterior of a building says something about its interior, at Lloyd's we find then that silence is represented by noise, simplicity by complication, emptiness by busyness. But here I make a pun, for what is a market but business? Is it not that the actual market — that is, the business that goes on in the Room, as opposed to the space in which it takes place — is being represented here by the busy-ness of the mechanical exterior?

What we have here is not, as one English critic said, "the romance of the machine"; for despite the Saint Elian flourish of the service towers, insurance is not a preoccupation of the aesthetic dynamist, no more than dangerous driving is of aesthetic interest to the underwriter. Was Marinetti insured



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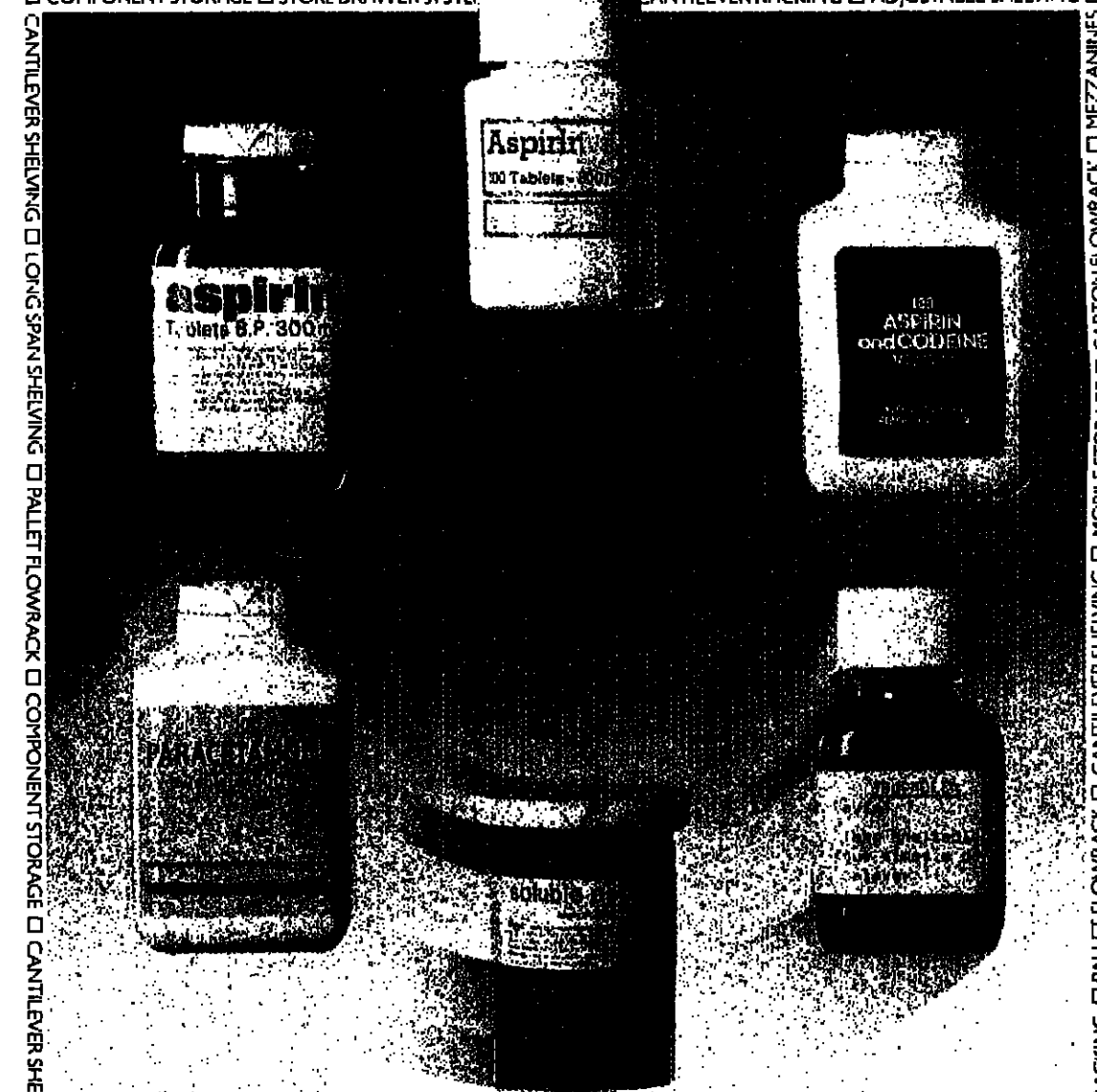
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## Survey

# COMPUTERS

In a special 14-page report, Richard Twinch assesses current computer-aided design trends, and how architects are getting to grips with them.



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## Getting it together

PERHAPS the major pre-occupation of many people already using CAD, as well as those still drawing up courage to enter the field, is how to ensure compatibility with other systems used by other professionals.

There are those who claim the only way to achieve stability is by sticking to one operating system and one hardware standard. In this there are at least two major schools of thought:

- IBM compatibility is all.
- UNIX is the operating system to use, linked to hardware that complies with certain international standards.

There are strong reasons to support these views of compatibility, not least vested interest, but they do suffer from historical and practical drawbacks.

Hardware is impossible to fix down to a standard, since technology is moving so fast. Any standard configuration is outmoded almost as soon as it is standardised (or before) by the arrival of a new chip or the development of a new process to make components faster and cheaper. Many early CAD systems relied heavily on Tektronix compatibility as standard, a compatibility that vanished overnight when the hardware was discontinued, leaving many high and dry. At present it is uncertain whether IBM will continue to propound its own PC standardisation, which has led to erosion of its profit margins.

Operating systems are largely for the convenience of the programmer. UNIX is certainly a very powerful one, MS DOS (as in IBM PC) most widely used. Others (and variants of others) will doubtless follow. Many now recognise that it is the user interface (ie how the user interacts with the software through a keyboard/mouse etc) that is more important to the user than the operating system itself, whose inner workings are best hidden if they are not to confuse. The system that has done most to revolutionise this way of thinking is the Apple Macintosh, which is a delight to use, and which has an operating system all of its own.

Beyond the dichotomy of

hardware and operating systems there are those who view compatibility of data interchanges as being the essential feature of current and future CAD systems, a view which I share, and this article describes how several different organisations are addressing this problem.

### D'Arcy Race

To understand D'Arcy Race Limited's approach to translators it is helpful to give some background information on the organisation, which was set up seven years ago by Dick D'Arcy and Steve Race, both architects who had worked on developing the use of CAD in hospital design for the Oxfordshire Regional Health Authority.

The authority provided the major impetus to the development of BDS (Building Design System), through GDS (General Drafting System), by the then Applied Research of Cambridge (ARC), which has since been taken over by McDonnell Douglas corporation of America (a fact much mourned by Race).

D'Arcy Race was established initially as a drafting bureau. The co-directors were aware that they had the requisite knowledge of CAD which could provide an entry into large-scale architectural design work. Naturally enough they turned to ARC to provide the CAD system which was implemented on a then state-of-the-art PRIME computer.

D'Arcy Race have been successful in surviving and establishing an international reputation for themselves as a drafting bureau and as consultants, so much so that between Christmas and April this year, the Fitzroy Robinson Partnership bought them up in toto, and moved them into their offices in Portland Place. This seems to be beneficial to all parties, taking place overnight in business terms (three months).

The Fitzroy Robinson Partnership have acquired the technological expertise they needed, D'Arcy has gone on to research in America, and Race continues as managing director. D'Arcy Race Ltd is still continuing to practice as an inde-

continued page 40

## One way to build a reputation

Today, the designer of the Leaning Tower of Pisa would probably end up in prison rather than in the history books. And all for the sake of a breakdown in communications between architect and engineer.

Thankfully today, technology is available to prevent this happening, whilst simultaneously saving time and increasing profitability. It's a CAD system called GDS.

GDS builds the links between different disciplines - assisting in the preparation of drawings with its new 3-D modelling and comprehensive draughting capabilities. GDS drawings then become the template for other members of the design team, and, form the database for maintenance engineers and facility managers.

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## Computers

from page 39

pendent drafting bureau (remaining as a company separate from the Fitzroy Robinson Partnership), employing a mix of architects and technicians to supply a variety of services: simple drafting, software development, design and CAD consultancy.

One feature that attracted Fitzroy Robinson to D'Arcy Race was their involvement with software development, in particular direct translators from one CAD system to another, eg, GDS to Intergraph, GDS to Autocad etc. The need arose initially from D'Arcy Race's own bureau work, and subsequently from requests through the "grapevine".

Race is a pragmatist by nature and feels that in translation one should use what is "necessary, useful and available" for any one job, rather than be dogmatic about operating systems, protocols, hardware etc. He is not complimentary about the efforts of other bodies (including the RIBA), to develop translators which are encumbered by "intellectual constipation and bureaucracy".

D'Arcy Race employ a spec-

alist programmer, Adam Gawne-Cain, who is linked into the PRIME through an Olivetti M24.

As with the bureau service, the translator software works at several levels, depending on whether it is just the question of transfer of the "picture" for viewing and printing, or whether the original data is to be modified on the secondary system. The latter naturally involves much more work and requires decisions being made on the transfer of say a 2-D "object" in GDS into a series of "layers" as in Autocad. Having prepared translators, D'Arcy Race is proposing to sell them to other clients. One piece of software being specially developed is digital information from GDS to Ordnance Survey maps, and other formats.

This is valuable and useful work, and undoubtedly is a growth area in software and indeed hardware development, as proved during the writing of this article by the arrival of a 14-page brochure from a firm called Connexions whose sole business is to supply cables between micros and micros and peripherals (printers etc).

## BSRIA

Such software is, however, very much one-off, and as pointed out by the BSRIA (Building Services Research & Information Association) in their recent booklet *Data Exchange Between Computer Systems in the Construction Industry* by Jeff Wix and Colin McLelland, the benefits of such translators are that they are very fast, but that the disadvantages are: "(a) two translators are needed for exchange between every system; (b) every time a system is updated, the translators software must be updated with it; (c) archiving of data from previous software revisions or previous hardware revisions may be a problem."

Consequently, they surmise that it will only be practical to maintain direct translators between the major half-dozen systems (this alone is 30 translators). For other systems they are promoting the use of an international standard — a neutral file structure that will act as an intermediary between systems, but which will allow far greater flexibility since it will only be necessary for each piece of software to read and write to the neutral files. This will take longer than direct links since two processes are involved instead of one, but the extra flexibility is thought to be of far greater importance and give longer term security to data.

Such ideas are by no means new, but their implementation is slow and learning how to use them is taking time. We forget just how new CAD still is in design terms and how many new concepts are still being invented. The booklet charts the history of development of the major international standards and concludes that the system most likely to succeed is known at present as IGES (Initial Graphics Exchange Specification). This in turn is due to evolve into PDES (Product Data Exchange Specification) and eventually all become known as STEP.

This sounds confusing and goes a long way to explain why D'Arcy Race have opted for the direct approach, but it is undoubtedly necessary and the good news is that it is all tending to work towards just one international standard. How that standard will then be implemented is another matter. At present, just because software

is so-called IGES compatible doesn't mean it will automatically link with another IGES compatible product, since IGES itself has many subsets of data.

What is required is a body to decide which subset applies to what data (ie what is appropriate for specification notes, what to graphical symbols etc), and this is now being done by a new CAD/CAM data exchange technical centre based at the University of Leeds.

## CalComp

The purpose of all this work is to move towards a common graphical and alpha-numeric data pool from which the different disciplines can communicate. An example of this in practice is in recent developments of the CalComp CAD system which has recently, in conjunction with BSRIA, been demonstrating its new developments in integrated services and CAD design as part of a series of educational seminars.

Integrated services CAD is not wholly new, but what is new is that to a large extent the software designs the ductwork etc from parameters entered by the engineer and automatically produces the actual drawing to match the calculated specification. This is obviously very powerful and the sort of application which makes tantamount the need to communicate between graphical systems and disciplines. As yet these are early days for such systems, which are largely based upon USA practice.

Where one system leads, the others are shortly to follow and the common need perceived by all the intelligent software producers is that of compatibility. However much that might appear to fall into the hands of competitors in the short term, it is now regarded as the only way to win the respect and overcome the fear of the majority of users in the long run.

D'Arcy Race Ltd: Steve Race, 96 Portland Place, London W1N 3HD. Telephone: 01-631 44841.  
BSRIA: Jeff Wix or Colin McLelland, BSRIA, Computer Centre, Old Bracknell Lane West, Bracknell, Berks RG12 4AH. Telephone (0344) 426311.  
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## Getting to grips with Rucaps

ON September 5, I reported on some of the recent developments of the Rucaps CAD system, which is developed and sold by GMW Computers of Berkhamstead. The articles here describe the experiences of two practices in Kent writes Richard Twinn.

Both are relatively new to Rucaps. But otherwise have very different practice profiles and experience. My main concern is in showing the decision making processes that have gone on in choosing a system (in this case Rucaps) and the experiences and problems facing the practice in learning to make the best use out of this type of CAD.

## PPI Consultants

PPI Consultants is a medium-sized inter-disciplinary practice in Tunbridge Wells that has been running for some 16 years as an incorporated company with unlimited liability. PPI currently has some 40 staff which includes five qualified architects, a civil engineer and structural engineer and a large M & E contingent which provides the largest proportion of staff. The general feel of the practice is of a well-established business.

Brian Mead, the senior architect and one of the original directors, was the driving force behind the purchase of a computer system. PPI had been aware that there was a need to computerise as long ago as 1981, but it was not until last summer (1985) that it finally decided to go for a Rucaps system. This, as Mead admitted, was largely a matter of intuition and discovering which system they felt most comfortable with. At the same time their decision was based on a number of very rational criteria:

- The system should be essentially 3D (despite being advised by some that they would not use this facility).
- It should tie in with systems used by both their clients and contractors. The PSA are important clients so their views were taken into account (PSA/CICA report on CAD that came out in October last year).
- Two of the large M & E contractors (Young Austen Young and Haden Young) that they dealt with on a regular basis were already using Rucaps.
- As a multi-disciplinary practice they required solid modelling and the facility for clash detection, eg ductwork

and steel frame.  
(c) They had a large contract of several million pounds that was suitable to be worked using computer system. Before purchasing the system they made sure that their client (Ciba-Geigy) was happy with this choice.

The system they chose was Rucaps Colour system with a digitiser, Prime 2250 computer, Benson 16 plotter and the additional 1/2 workstation which can view graphics, set up plot and allow standard items to be keyed-in. The cost was about £100,000. PPI particularly chose a more expensive "intelligent" plotter than the standard provided by GMW as part of Rucaps. This allows for greater flexibility in scaling, rotating etc, but as one user subsequently pointed out, this could be a double-edged sword, as even a straightforward print has to be set up by a sequence of commands that requires learning and still the plotter needs constant attention when running to replace worn-out pens etc. The output, however, does look very good. The plotter also generates a lot of noise, and is kept in a sound-proofed room away from the rest of the computer system.

So far GMW have trained people to use the system, and another four are undergoing training. Mead pointed out that the cost of this, including machine time costed at £40 per hour, works out at between £2,000 to £3,000 per person, and that the cost of training at present stands at some £30,000. PPI are committed to make the system work and are aware of the cost implications — which for some practices can reach £500,000 over a five-year period.



Laboratory layout.

PPI are well placed to recruit competent staff at out-of-London rates and feel that the expense of training many people will keep the running costs down in the long run, since they will not be reliant on one or two "experts" who might be tempted away by higher salaries, leaving PPI with the problem of recruiting skilled staff at premium rates.

Brian Mead was full of praise both for GMW and for the Rucaps Users Group, which he had found to be supportive and helpful and had taken out the full maintenance contract on both hardware and software, that would enable PPI to be kept up to date. As far as installing the system was concerned, GMW had attended a full staff meeting where everybody, including the secretaries, were introduced to the system and had their questions and fears answered. Mead agreed that this is an essential exercise if a system is to be used efficiently and successfully.

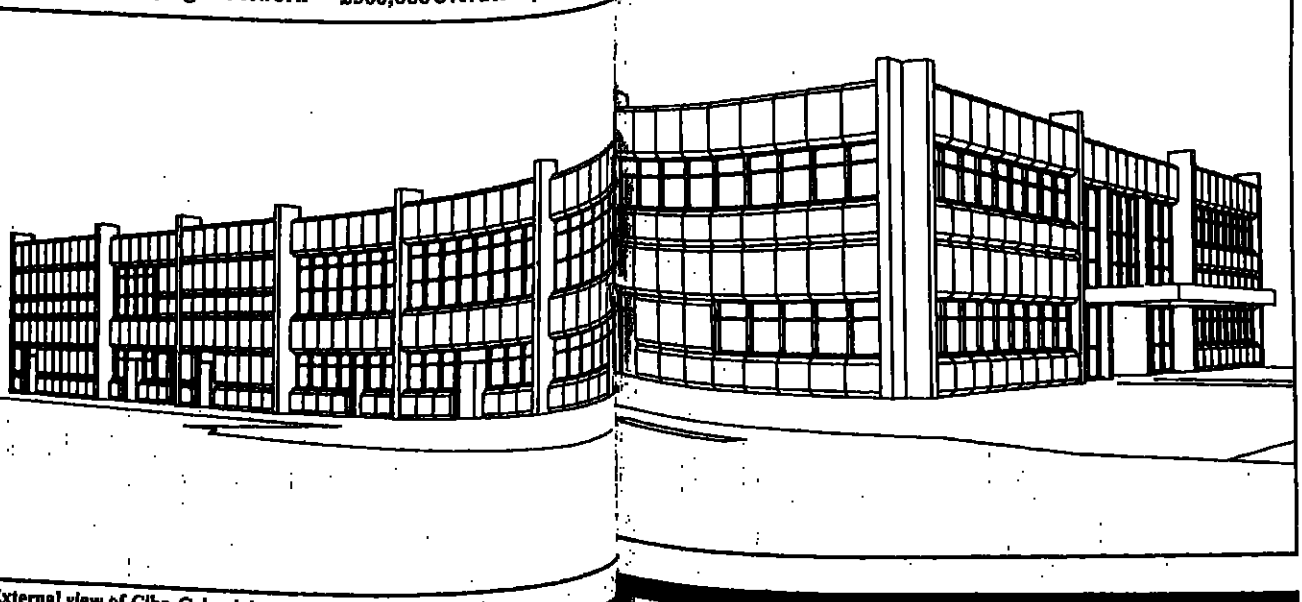
I was shown around the system by Simon Padley, who had joined PPI the same day as the Rucaps system arrived and is the project architect for the major project, the factory and laboratory complex for Ciba-Geigy at Duxford. Padley had had only limited computer experience before joining PPI and was one of the first to be trained by GMW. He described the process of learning as akin to playing a piano — "just because you know how to play notes does not mean you can immediately play a concerto". Six months after being installed, the system was starting to become fully productive. The first job was to digitise — in the survey, together with complex under-

ground pipework. Site contours have been calculated from spot levels manually and digitised into the computer. Padley explained that it was hoped that in due course this would be done automatically through a link with the Eclipse survey system running on a separate micro system, since the Eclipse system has the ability to generate contours automatically.

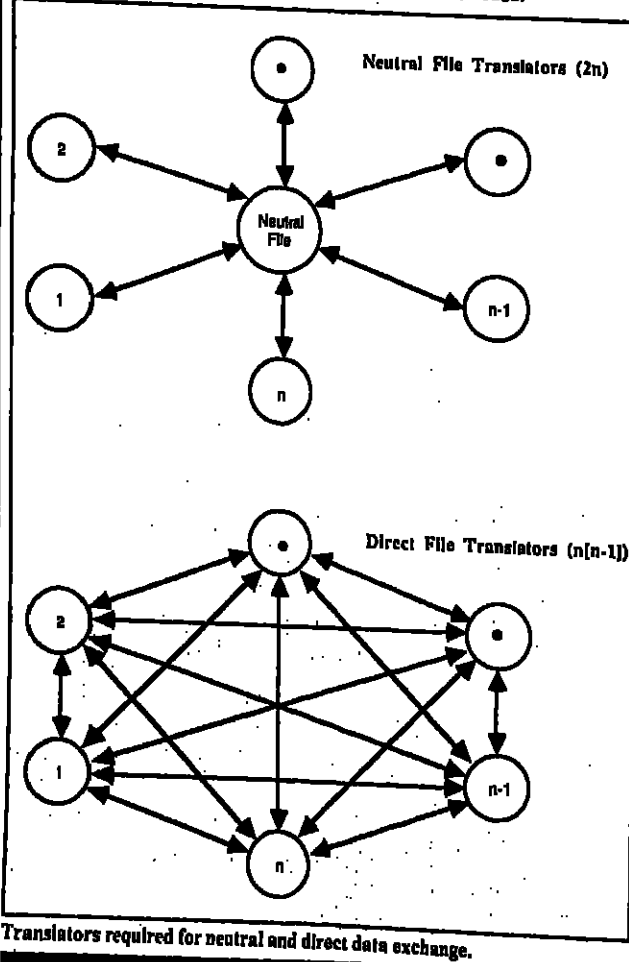
So far the system had been largely used in 2-D mode — apart from the production of 3-D views of the factory and some internal layouts. These had themselves acted as a catalyst in making the client realise the urgency of providing correct information since, rather than seeing abstract 2-D plans, they were being shown the full model. PPI seem to have chosen the right approach in getting going — that is to start with something large enough but not too complicated.

One thing they are working out at the moment is the order of work. Having fixed the site and building layout, the structural engineers had taken over the system and were entering all the general steel arrangement data into the building model of the factory in preparation for the steel subcontract tender. This could have been a hold-up for the architects in other circumstances, but as it turned out the specification for the design of the laboratories had not been finalised. This meant further architectural work was held up in any case. In the meantime an architectural technician was entering catalogues of standard elements (lab sinks) into the data bank; an important prelude for doing the detailed laboratory layouts.

So far the M & E side were



External view of Ciba-Geigy laboratories, PPI Consultants.



Translators required for neutral and direct data exchange.

## Computers

lying behind the architects and structural engineers, but it was thought they would catch up once their work really began in earnest on the current job. The architects were not expecting to do their working details using the system. For such a wide-ranging practice just having one full terminal is going to prove to be a limitation, and more terminals will need to be added shortly.

PPI have not fully used the clash detection routines, which are not "automatic" but show up as a different colour on the screen when they are searched for. Padley would also like the parametric package (where you can vary dimensions for a given component, eg a staircase). However, like everything at this level of operation, this is an extra even on a £100,000 system, and extras tend to have three Os after the first digit!

Padley was surprised to find limits on the use of text that had been resolved years ago on far smaller systems such as Robocom which he had used previously. The 3-D module (Auto-prod) does not support text at all and even in 2-D mode it is not possible to mix upper and lower

case letters. Apparently these are matters currently undergoing development by GMW, one would hope that such basic facilities would be part of the standard upgrade service rather than new modules that have to be bought afresh.

Note: Since researching this article in June, Rucaps has indeed been amended to include facilities for upper and lower case letters, as I have been reliably informed by the managing director, John Davison. In addition this facility has been included free of charge to existing users. It is heartening to find such alacrity in rectifying shortcomings and responding to user requirements — not many managing directors of CAD companies can be that concerned with such details!

Generally speaking, PPI and their Rucaps system seem to be settling in together comfortably with no shortage of work. Being a mature practice they do not seem at present to be intimidated by the cost of running the system and are looking forward to reaping the benefits that it should offer. I hope to be able to give an update in due course.

continued page 42

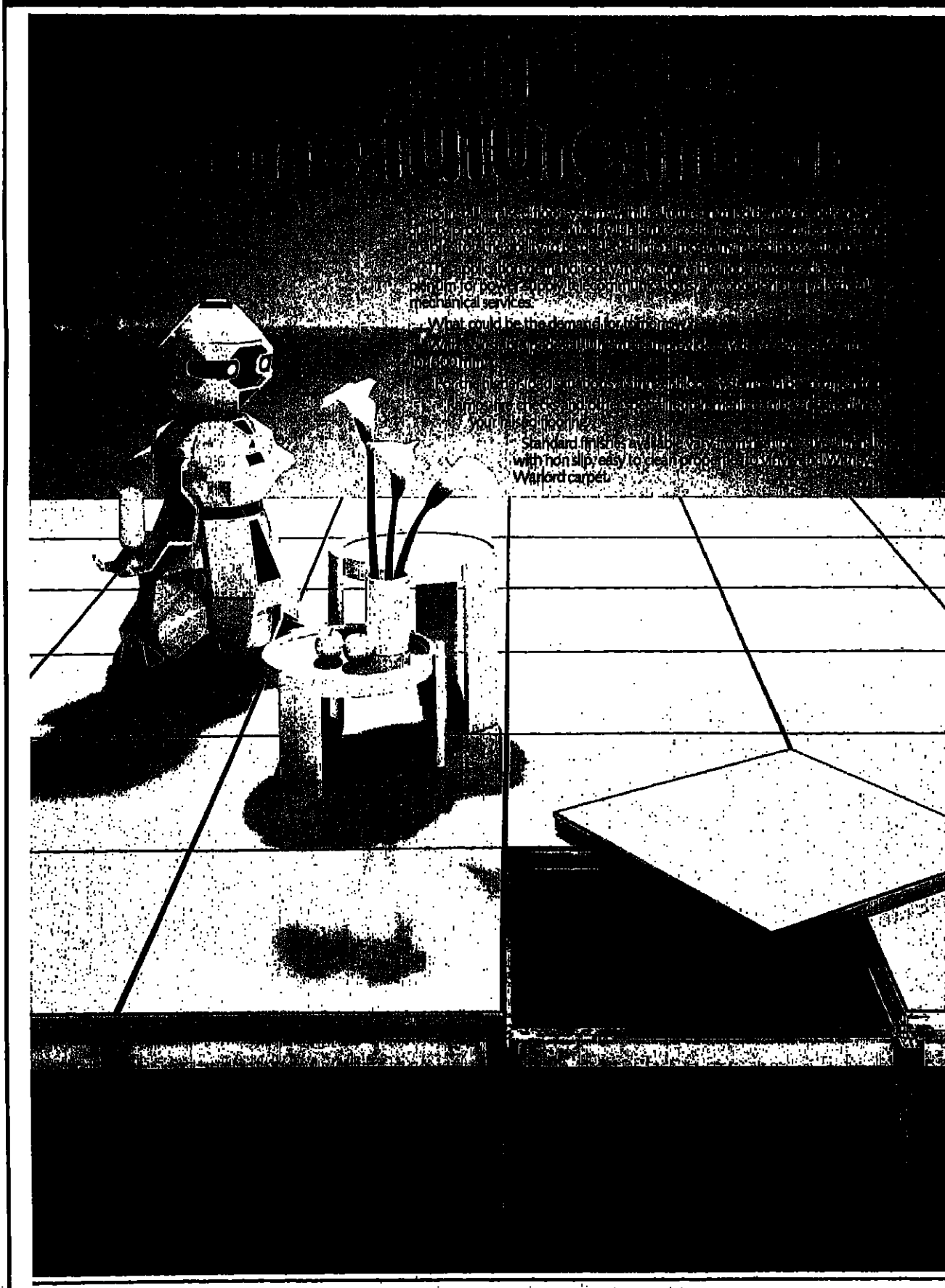
## Drawing award

ARCHITECTS Frank Shaw & Partners of Chesterfield have won this year's computer-aided draughting (cad) competition, organised by the manufacturer of the Rucaps cad system, GMW Computers of Berkhamstead.

Entries were received from both national and international computer users, now numbering 96 in total.

There were three categories of entry, with Paul Bower of the practice winning category 1 and £500 for the most comprehensive visual drawing of part of a proposed building. Lynne Haywood of the practice was placed a highly commended second in this category.

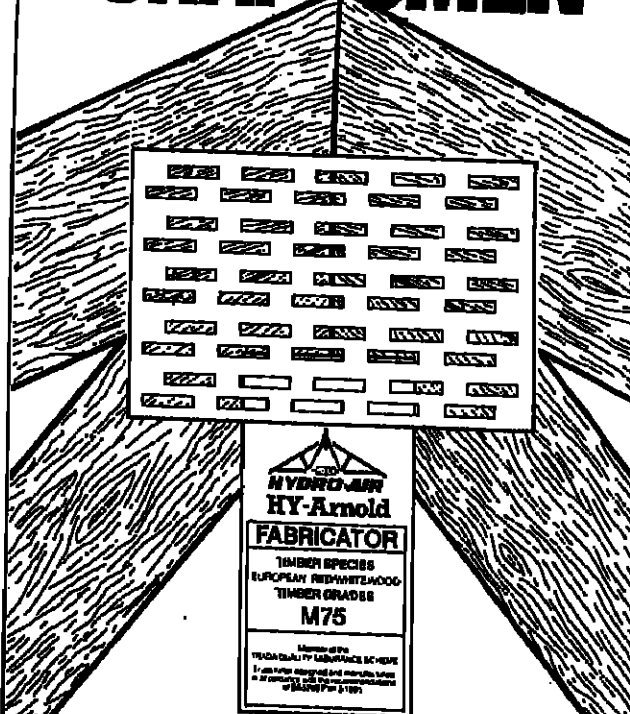
Bower, who was also highly commended in category 2 for his submission demonstrating the use of the system in producing three-dimensional visualisations from a proposed building.



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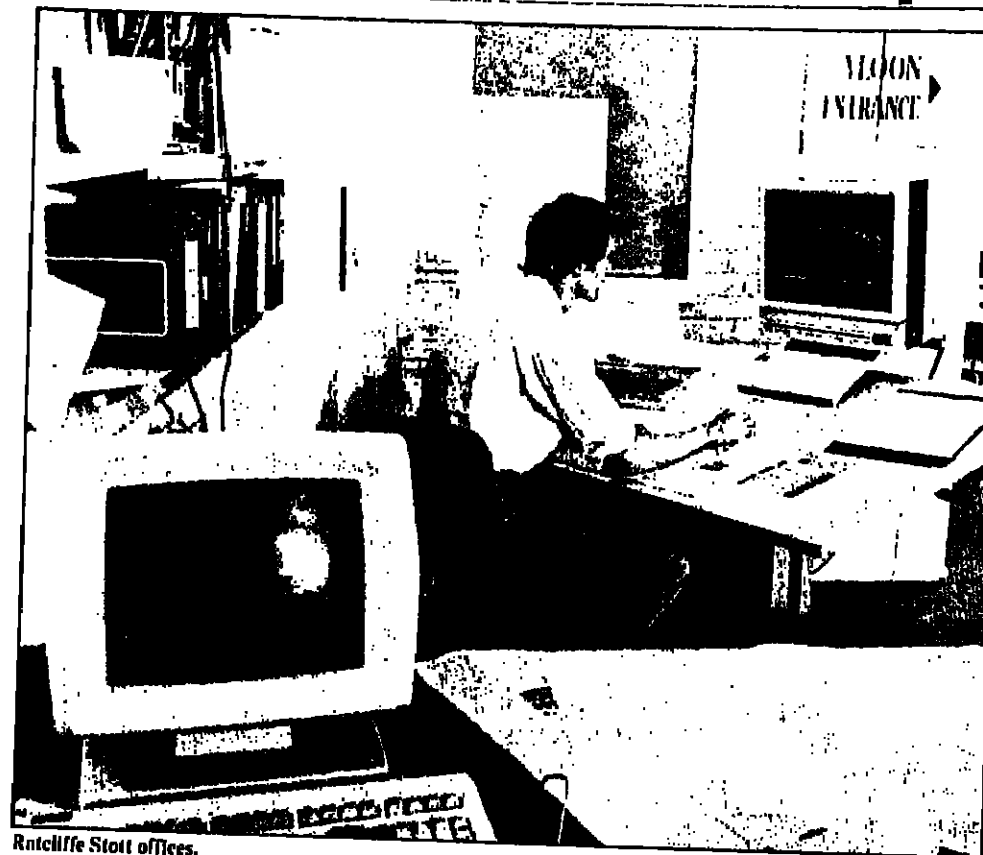
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Ratcliffe Stott offices.

### Ratcliffe Stott Associates

RATCLIFFE Stott Associates are quite a different architectural practice from PPI Consultants. For a start they are a young firm (three years old), quite small (10 people including four qualified architects, two interior designers) and they concentrate on architectural and interior design work, much of which is interior refurbishments of hotels and restaurants.

The work I visited was a hotel, restaurant and bar conversion for the Harvester Group, recently affected by the Hanson takeover of the Imperial Group. The largest building so far completed on Rucaps is a £2.6m hotel in Ashford, now under construction. A feature of their work is direct running of contracts in which they participate actively in the final stages of fitting out — on the principle that what the client sees in the end counts and that this is too important to be left to contractors.

Mike Stott was for some time senior architect for Trusthouse Forte Hotels, with whom he was responsible (among other buildings) for the attractive Post House Hotels just outside Cambridge and at Wrotham in Kent. His wife, Jill, is an interior designer, and together in 1983 they broke free from the constraints of corporate life to set up Ratcliffe Stott Associates.

While at THF, Stott had carried out feasibility studies on the use of appropriate CAD and had come to the conclusion that Rucaps was the best system for THF, who balked at buying a system at the last moment. Another close link Ratcliffe Stott had with Rucaps was that Stott had known John Davidson (the managing director of GMW), from the early days.

Once set up, it was quite natural for Ratcliffe Stott to wish to go for Rucaps, having seen the need for CAD in the field of hotel and restaurant design where millimetres of table/bed space can determine the commercial success of a business. At first Ratcliffe Stott rented a DEC system from GMW Computers since GMW were interested in helping set up such a new practice with Rucaps. Ratcliffe Stott started by being committed (and still are) to making CAD work as a 2-D and 3-D design tool rather than just a working drawing production mechanism.

The major problem from the outset was the need for expertise in handling the system. The practice had started so well that Stott himself did not have time, nor did he really want to be, the computer manager. The answer was found in an advert (placed in BD in October 1985) looking for "A Lion Tamer to control a Rucaps CAD of a Beast". This came to the attention of Ian Bevan, a qualified architect who had been churning out working drawings of hospitals using Rucaps for Frank Shaw & Partners in Chesterfield for five years. His reply started "Dear Ringmaster" and consequently he got the job, finding that New Ash Green was unique in the South-east in having a pleasant rural environment and affordable housing.

The first thing Bevan did was persuade Ratcliffe Stott to upgrade from the DEC system to the Prime 2250 which he had found to be vastly superior when installed at Frank Shaw's. This was done, at which stage, Ratcliffe Stott took the opportunity to rationalise the whole system to a lease purchase at

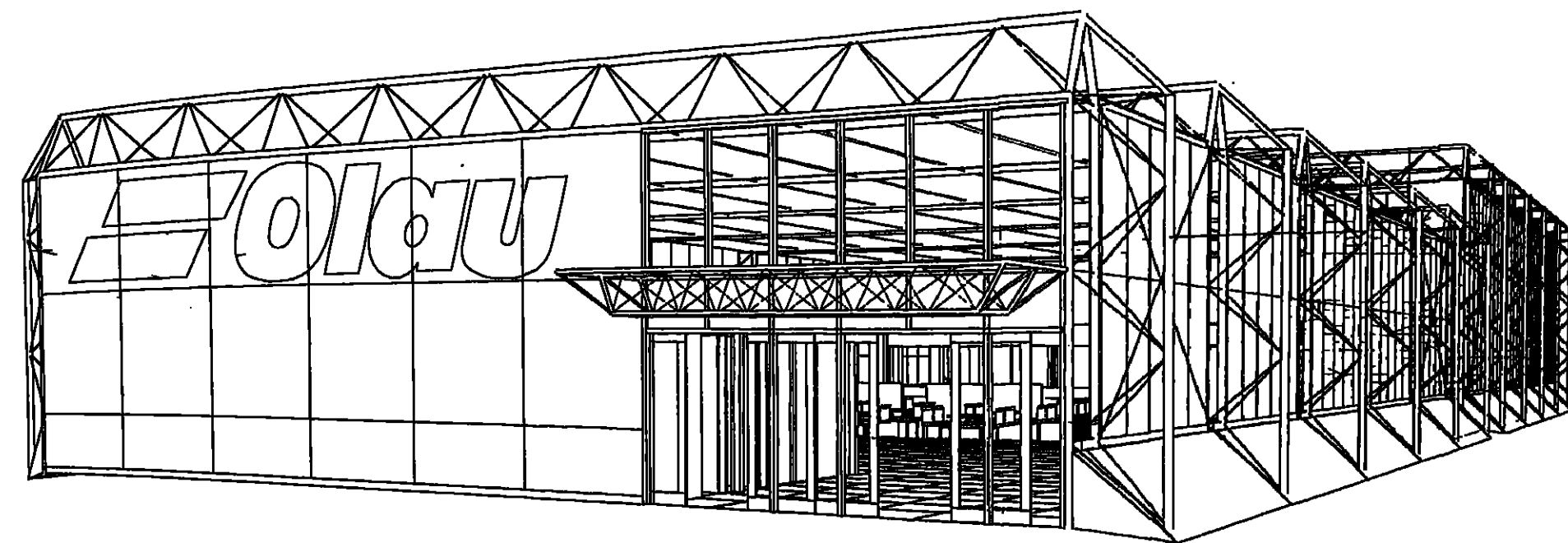
little extra cost per month, although over a four-year period.

The first system had been set up in a green tent in the New Ash Green office to protect the system from dust and heat. The time I arrived to see the system (mid-June) the place had moved across the block itself, and the computer plotter (Benson 1322) was installed in their own purpose-built, air-conditioned, sound-proof unit. Whatever manufacturers say, it is important to keep all computer equipment cool, because heat degrades chips, which causes a lot of extra cost.

From an initial impression it is clear that the use of computers has permeated the office. For instance, the accounts and sheets have been on computers since the practice started. Digital Rainbow micro-plotter as part of the Rucaps package. This is not the practice administrator's programme (Pegasus), word processing (Wordstar) for letters, and a spreadsheet programme for job costing. The so well established that it is hardly commented upon. The Rucaps system (AO digitiser and Sigmex colour scanner) is set up in the centre of the plan office and is used mainly by Bevan and a young interior designer.

Bevan disagrees with the policy of training lots of people simultaneously, because it poses a large economic load on the office. Unless the system is used regularly, training can be soon forgotten. Ratcliffe Stott are thus pursuing a gradual policy of acclimatisation and training for their other staff.

The CAD system has proved itself effective in capable hands particularly in the hotel design at Ashford where the client was delighted to see for the first time all the furniture set out on its floor plans. But Ratcliffe Stott did not, on this occasion, do the working details using the computer. Finding hand details more efficient for this type of building. Large sections of spec notes were done on the word processor and pasted on to the drawings to further increase capacity, within a tight working drawing programme. The system was, however, very effective as a production tool, including a bureau service to structural engineer for all its base negative general arrangement drawings.



Olau ferry passenger hall.

The 3-D facilities are effective in quickly replanning restaurant layouts due to last-minute client alterations, and in showing in 2-D and 3-D alternatives (see illustrations). For a small practice the main problem is in continuity of work, ie in finding suitably sized projects with a degree of repetition where CAD is most effective. Their criteria for deciding whether or not to put a scheme on to Rucaps are:

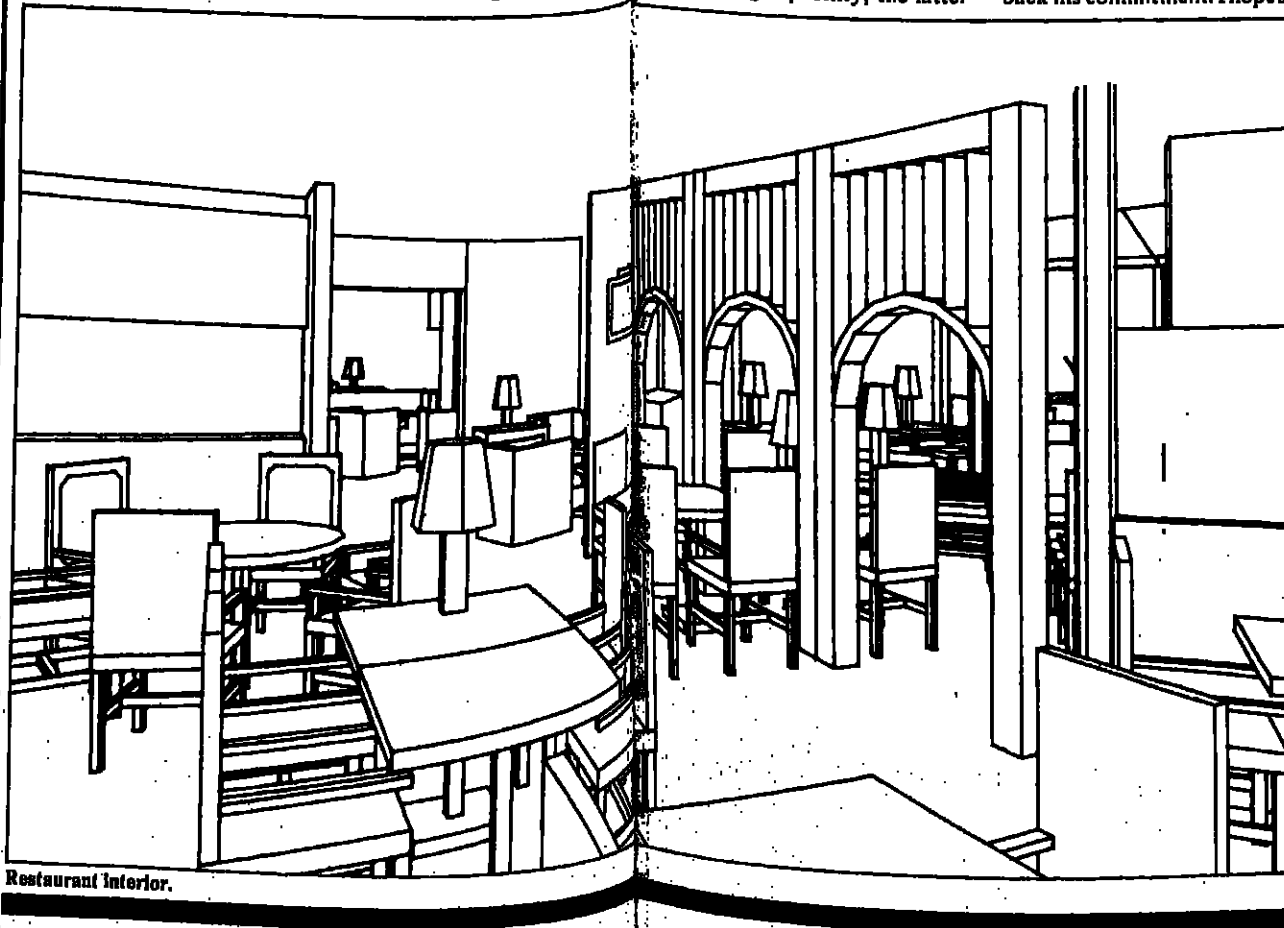
- (a) how effectively CAD would be used as an appropriate technique for the job;
- (b) whether the computer is available/extension of working day;
- (c) client's expectation of whether CAD would be used;
- (d) effectiveness of CAD as a sales support tool.

The efficient use of the CAD system is naturally a major preoccupation of the senior partner, particularly since the cost of maintenance alone (hardware and software) is in the order of £1,100 per month. One reason for investing in the system is the ability to do large (and even huge) jobs with only a small workforce. It is hoped that a major contract in the Mediterranean will shortly fall on their desks (or rather on the monitor), at which time they will be able to afford to add a further colour workstation and colour solid modelling capability, the latter

alone being an extra £21,000. They are also interested in the new RDM application (related data management, which adds a specification as part of the component description) for a further £5,000.

Ratcliffe Stott are setting up a computer bureau company with a local structural engineers practice, John Allen Associates, to provide support for both offices and offer a service to other practices in the construction field. The two practices are working together on a project for a new passenger hall for Olau Ferries at Sheerness, the design scheme recently completed on Rucaps in two weeks and a 40-bedroom retirement care home in Kent.

The practice is also actively diversifying into the office and commercial field. Ratcliffe Stott have shown that a small, young practice can invest in CAD and, provided they find the right staff, can make full use of all its facilities, particularly on the 3-D side. Mike Stott knows that he is taking a risk with architectural work load being so variable, but he equally knows that, if successful, his practice will be able to deal with the size of jobs that he is used to doing and wishes to continue doing, and feels that clients will respect and back his commitment. I hope so.



Restaurant interior.

## Computers/Rucaps

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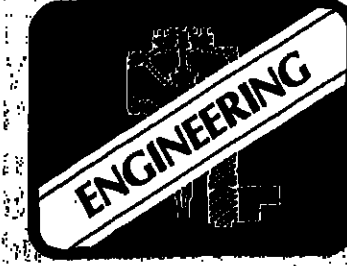
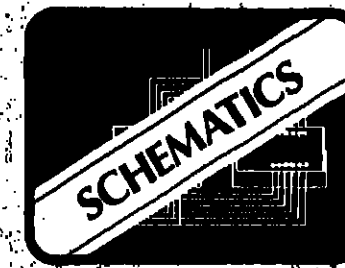
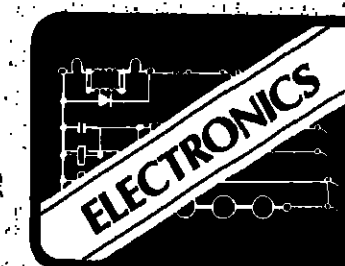
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# Corporate images

GABLE has been a well respected integrated CAD system on the university circuit for several years, being originally developed at the Sheffield University school of architecture.

Commercially it has had its problems. Initially it was marketed by Genesis which has since disappeared from view, and it is now marketed and developed by Gable CAD Systems Ltd.

On the technical front Gable has always been a strong proponent of integrated design, ie the ability to carry out design evaluation (eg condensation risks, energy losses, specification etc) in tandem with draughting and 3-D modelling. Early versions of Gable were painstakingly slow and relied heavily on inbuilt hardware facilities, which themselves became obsolete and required the complete rewriting of the software about four years ago.

Such difficulties are history. Gable are now sporting a range of software comparable with many of the early market leaders and running on very much state-of-the-art hardware. The university connection has no doubt helped with University Grants Committee approval of the system, and the subsequent deal worth £2.5 million to supply all university schools of architecture (and indeed all universities) with Gable. Apparently a similar arrangement is being entered into with the polytechnics.

Such background weighed heavily in favour of the system when Wallace Camp, a partner with Stewart Riddick & Partners, was on the lookout for a CAD system to help establish a power base to take his practice into the 1990s.

Stewart Riddick & Partners have been practising for 15 years from north London, and are responsible for a wide range of retail and commercial developments around the country as well as leisure facilities, banks and private housing. Their largest project to date (and designed on Gable) is the huge London Docklands Arena sports centre, which is still under construction.

The practice is at pains to point out that it never turns down work, however small,

preferring to pass on the smallest jobs to employees to do in evenings and weekends. Much of their work is with, or on behalf of, corporations, institutions and developers for whom they carry out management contracts if required. They are not multi-disciplinary in the sense of having structural and M&E engineers, but are multi-disciplinary in providing a blend of services on the management side reflecting their partners' professional backgrounds: Stewart Riddick is a surveyor, Cedric Contes a civil engineer, Wallace Camp an architect and Harvey Albert an interior designer.

Riddick makes no bones about wishing to develop a corporate structure and image, both to attract the corporate client and to circumvent the problem of practices relying heavily on the reputation and personality of the senior partner. "Corporations," says Riddick from behind the wheel of his light-blue Rolls, "virtually go on for ever."

It is with this philosophy that Stewart Riddick & Partners are going about expansion, which so far includes designing and building their new offices in Finchley, which exude established values and longevity both in their materials, proportions and well-detailed interiors. Such a building (apart from the yellow space-frame on the foyer ceiling) would be equally appropriate in style to a bank or insurance company. The offices themselves are a pleasing addition to the streetscene, and have won a suspicious populace in what is Margaret Thatcher's constituency. As far as future expansion is concerned Riddick makes no bones about his desire to acquire other practices in the locality that require an injection of fresh capital, ideas and management. As yet there is no wish to be absorbed by a larger grouping.

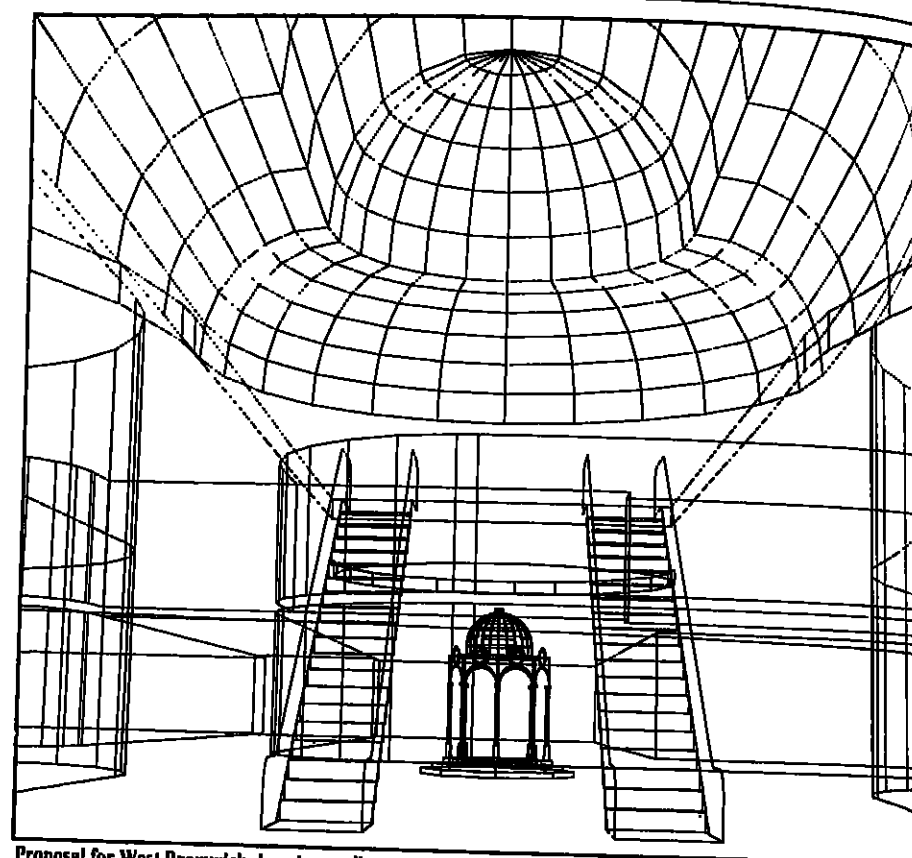
Purchasing a CAD system is very much part of the forward expansion of the "competent and successful" policy, Gable was chosen because it offered:

- (1) a secure development base, not totally tied to commercial pressures;
- (2) a relatively cheap entry cost of about £65,000;
- (3) hardware and software

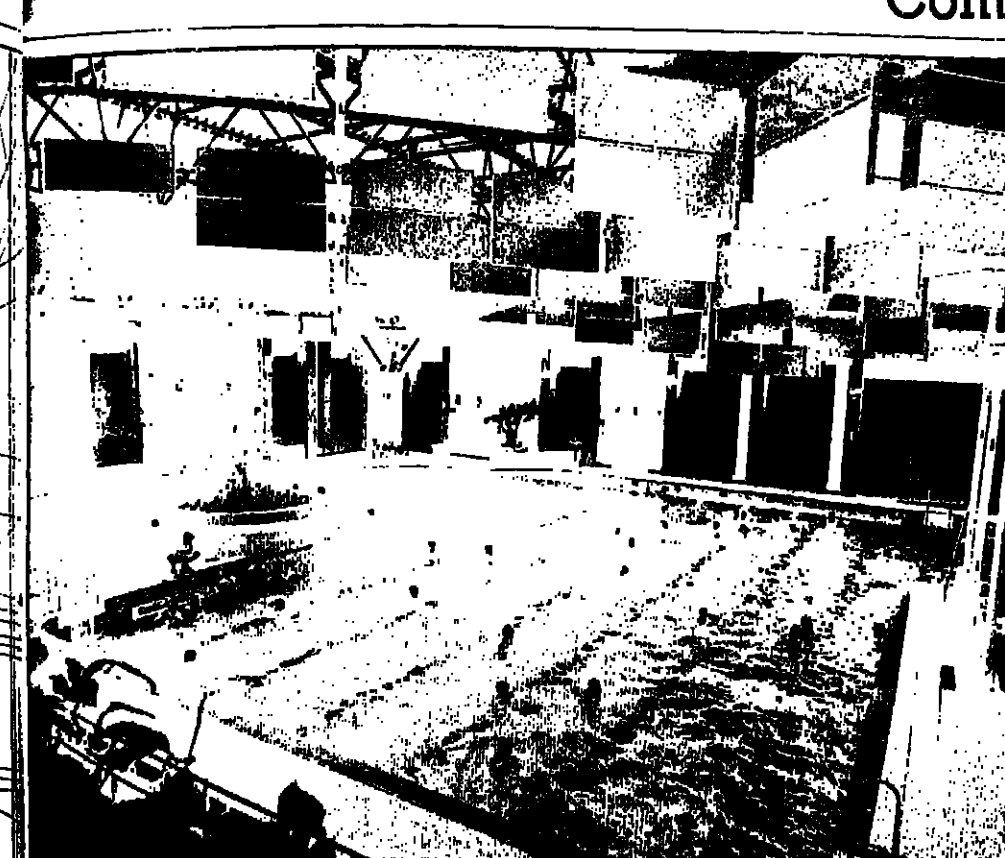
maintenance of 10 per cent purchase cost per annum;

(4) ability to add extra work stations without adding additional software costs.

The system was installed a year ago and recently moved into their new offices. The practice were astute in snapping up Andrew Bevan, who had been using the system for three years already, straight from the Sheffield school of architecture. This enabled the system to be used "in anger" from the start, and generated immediate demand for extra software and hardware facilities, that has just about doubled the initial purchase price. Bevan has helped train some five to six other members of the practice, and

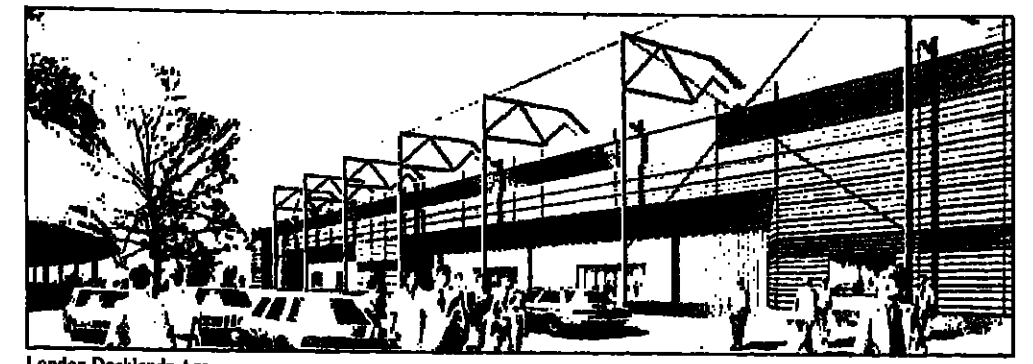


Proposal for West Dromwich shopping mall.

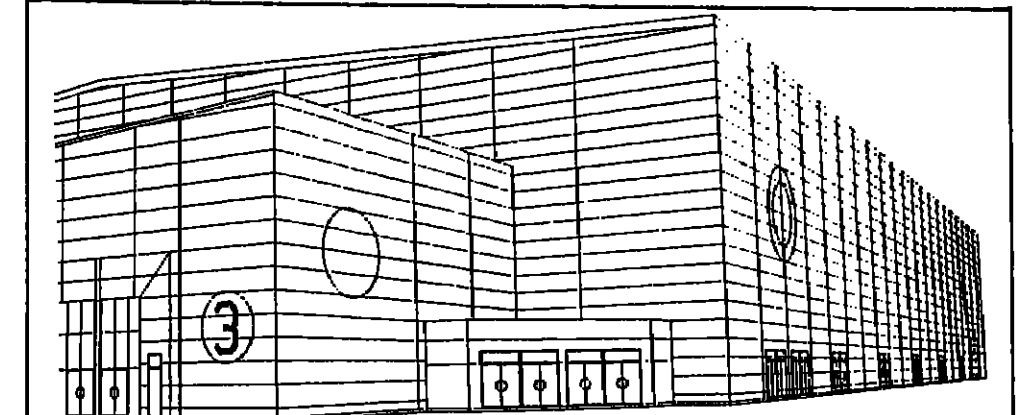


Magister leisure pool complex, Kingston upon Thames.

## Computers



London Docklands Arena.



Large multi-purpose space.

Camp is at present negotiating with the Manpower Services Commission for funds to train a further 15 users at their offices, a facility that other users of CAD might note.

Since purchasing the system the practice has added a further two colour workstations with 14in colour monitors (Tetronix 4106A) and bit-pad input tablets (Tetronix 4957). The plotter is a Hewlett Packard 7585B A0 pen plotter. The whole installation fits neatly into some 250sq ft of office space, wires to the central processor being discreetly hidden in purpose-built ducting that runs throughout the building. The processor (in a separate room) is the powerful Data General (MV 4000 DC) with 3 megabytes of memory.

The computer itself is powerful enough to allow six graphics terminals to work simultaneously on different projects, plus run networks of terminals for carrying out wordprocessing and management functions. Current software for the latter being written in-house is rather piecemeal, and alternatives to run on the Data General are being sought.

I saw some impressive work presented as an automatic "play-through" demonstration that had been prepared beforehand but which showed real-time generation of hidden line perspectives as well as sample working drawings. The performance was unrecognisable from the earlier version I saw three to four years ago, and nobody could accuse it of being slow. The problem of getting enough data on a 14-inch screen is offset by the stunning colour quality of the Tetronix screens, and the competent working drawings were proof of the efficacy of the system to do more than generate flashy graphics. The practice is wedded to colour, and have not really considered purchasing a 20in mono screen (which can be particularly effective for work-

ing drawings) as a prelude to purchasing a 20in colour screen which Camp considers at present to be too expensive at around £15,000.

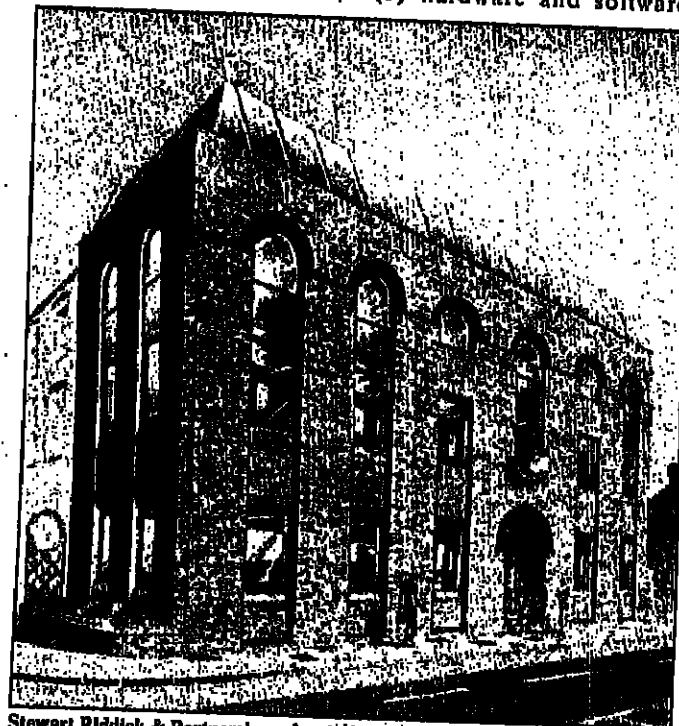
The system to date has been used successfully for early 3-D and elevational design evaluation, environmental design analysis and working drawings, though not as yet for working details. The practice are still learning skills, particularly with regard to entering tight City sites with unknown angles and dimensions. Finding the level of tolerance to work with is an important feature of using CAD, which tends to require very accurate data to function. With accurate data (eg site survey) the computing power can be quickly harnessed as the practice found in winning a limited competition for the GLC residual body for industrial units in Lewisham, where the winning scheme was generated in just three days.

The user group is still quite small, with many of its members going through the process of upgrading obsolete hardware and software. The availability of droves of trained Gable users emerging from schools of architecture is going to play a major role in the development of the CAD market in the years to come, which will no doubt soon expand the number of users.

Stewart Riddick & Partners are convinced that they have made the right moves in establishing a corporate base, powered by the extra CAD facilities that they can offer clients, from which to do battle with their competitors, the design and build companies. They also hope to dispel the myth that there are only three architects in the country.

Wallace Camp, Stewart Riddick & Partners, Stewart House, 930 High Road, North Finchley, London N12 9RT. 01-446 4131.  
Rick Hall, Gable CAD Systems Ltd, Aris Tower, Western Bank, Sheffield S10 2TP. (0742) 700696.

## The ups and downs of Downland.



Stewart Riddick & Partners' new head office in Finchley.

## Computers

## Learning curves

IMAGINE if hand draughting was related to riding a bicycle (dependable, flexible and fast in traffic) and running a mini-computer CAD system was akin to driving a (more or less powerful) car, then doing working drawings on a microcomputer is a bit like hitch-hiking.

You know you will probably get there in the end — but after several lifts and in an uncertain time. If you are well dressed and know where to stand, hitch-hiking can be effective, as I found, having missed the train in Ipswich to go and see Hugh Feilden of Russell & Feilden Architects, in rural Suffolk.

Russell & Feilden are a small practice formed about five years ago by Clifford Russell, an experienced architect of the old school who has since retired to consultancy status, and Hugh Feilden, who qualified at Cambridge in 1977. The practice has been largely rural based, working on one-off extensions, doctors' surgeries and more recently with developers on sheltered housing. In fact it is a typical small practice of which

there are hundreds and just the sort of market that the micro-computer CAD market is aiming at.

Feilden has been interested in micros for years, buying a Sinclair FX81 when it first appeared and, missing the Apple II/Commodore years, moved in and bought one of the earliest IBM PCs that came into the country over two years ago, so early in fact that he has since had many problems in correcting and enhancing the hardware which was an American import and not made in Britain at Greenock, which led people to think it was a far-eastern copy!

Despite early hardware difficulties, the IBM PC proved efficient and cost-effective from quite an early stage, being used

for word processing and spread sheet analysis. The latter has been used extensively for providing door, window and ironmongery schedules, fee calculations, hourly job costing, VAT calculations and contract estimation which has "saved his bacon" on several occasions and proved remarkably accurate in practice. Feilden also purchased the Silicon Office program (from Bristol Software), which is a database applications package, and programmed this himself for producing priced schedules of work and specifications.

All in all the use of the computer had been successful. The retirement of his partner and the move to Oxford into his newly renovated offices (a

tastefully converted ballroom adjoining his house) provided the impetus to launch into CAD. Feilden's main concern was to be able to produce working drawings without reliance on technicians, and be able to do with lines what he does successfully with words and figures. Russell and Feilden went for an Autocad system for the following reasons:

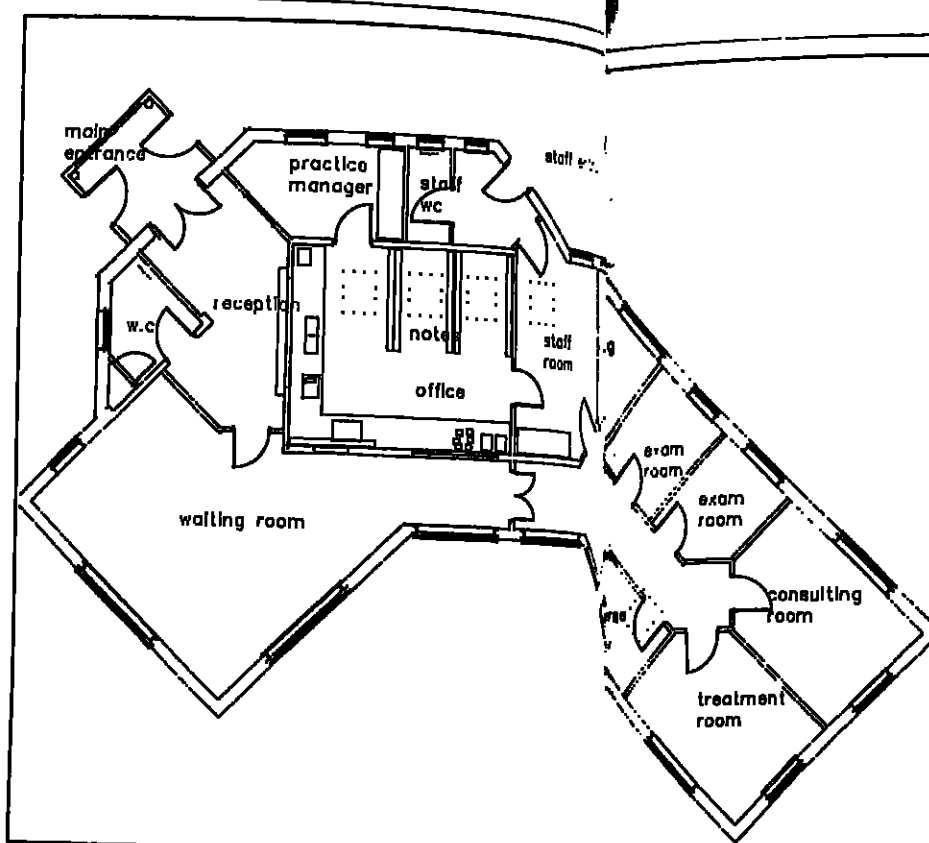
(a) RIBAS were providing manufacturers' data for it (RIBACAD) and the combination of RIBA and Autocad were "names which aren't going to go bust on you";

(b) it was available on the IBM PC and could be provided and hopefully supported by a local IBM dealer;

(c) that the extra investment cost of £240 per month (over three years) only required a saving of 10 hours a month of office time, if you charge at RIBA recommended rates;

(d) it looked quite easy to learn.

Last Christmas Russell & Feilden purchased the software together with a 20MB hard disc drive, Hewlett Packard 7475A A3 plotter, Calcomp 2000 15in X 15in digitiser and upgraded the IBM PC to 640K and inserted



Russell & Feilden on Autocad.

(somewhat late in the day) an 8087 chip (maths coprocessor) — to make it all run faster, an essential requirement in Feilden's view. After nine months of using the system Feilden now employs two part-time technicians. He uses Autocad system himself, though has found that certain limitations of his system make it no adequate substitute for good technical draughting. His experience can be summarised as:

(1) "my dealer hadn't got the faintest clue about how to use the program";

(2) "the potential is certainly there but it takes a long time to reach that potential";

(3) "you have got to get into the sophisticated bits to make leaps forward";

(4) "it takes as long to draw on the computer as it does by hand, when putting the drawing in first time";

(5) the most useful feature is the manipulation of drawings, for instance drawings can be entered at any scale and reproduced at any scale. This is helpful in converting from Imperial to Metric and for entering survey data. It has also proved effective in providing technicians with co-ordinated base drawings on which to work at different scales.

(6) the current 3-D facility is poor, there being no facility for sloping roof planes. The hidden line removal takes about 1/2-hour for not a very complex building (it is apparently down to 10mins on the IBM AT which is still slow compared with many true 3-D programs). Better 3-D modules are apparently on the way;

(7) the use of a standard 12in screen is too small to draw on accurately. The system is complex and it is difficult to remember which "layer" of the drawing you are working on, particularly with the relatively low resolution mono screen. Feilden feels that the major priority is to get a 20in CCG (Cambridge Computer Graphics) screen (costing about £2,500);

(8) there is a limit to the use of the A3 plotter — especially when so much of the practice is geared to A1 drawings. The colour facility is useful for adding services (lighting etc) but has limited application until colour copiers are more readily available. Feilden is considering the purchase of an A1 "turbo-plotter" which marches around a flat board at a fifth of the speed of the A3 plotter. He has yet to see it in action.

(9) "elevations produced tend to look mechanical, with little variation. Windows drawn in

detail tend to visually put themselves forward on simple elevations";

(11) RIBACAD is potentially useful, but at present there is little actual data available (eg one range of sanitary fittings and some roof tiles) which would be greatly enhanced by having say Boulton & Paul windows and doors. One criticism of the data supplied is that it is so detailed that it takes some time to 'switch-off' attributes before plotting and printing. (This is a criticism even common to those using RIBACAD with GDS);

(12) entry of survey data is quick and effective;

(13) facility for mirroring has proved effective in the case of a client who decided at the last moment to turn everything round. On the computer this is just one command rather than a complete redraw;

(14) the major cost is in learning to use the system.

In discussing progress and the current developments that Autocad is producing (eg addition of LISP to allow generation of 'macros' that allow for automatic generation of cavity walls etc.) it became clear that Autocad is really moving out of the sphere of what we at present consider to be micros. Its facilities are comparable to many large scale CAD systems and indeed Steve Race of D'Arcy Race (covered in another article) is seriously considering moving from a conventional mini-computer GDS (General Drafting System) to a network of terminals running Autocad software.

At the end of the day very 2-D draughting requires a very fast processor, a large high resolution screen and perhaps simultaneous colour, A1 or A0 plotting facilities, the ability to address about 2 megabytes of simultaneous memory and a large hard disc storage capacity. The difficulties with trying to run sophisticated software on less than adequate hardware and with a limited training budget are apparent; you need to learn as much as running a mini-system, such as CalComp, without the help of powerful hardware and with limited output. The cost of purchase is so low (and getting lower) that the dealer is likely to be ineffective in supporting you — since he (or she) has no money to do so.

It so happens that there is a new machine that has just recently been launched specifically with Autocad users in mind (Autocad is very successful in America, it less so in the UK).

This is the Compaq DeskPro 386 which starts at £5,399 and utilises the new Intel 386 silicon chip that is reputed to be the basis of future IBM models. This chip itself has vast potential for providing extra speed and power, and its use in the DeskPro 386 goes some way towards this, while running most (but not all) IBM PC and AT software.

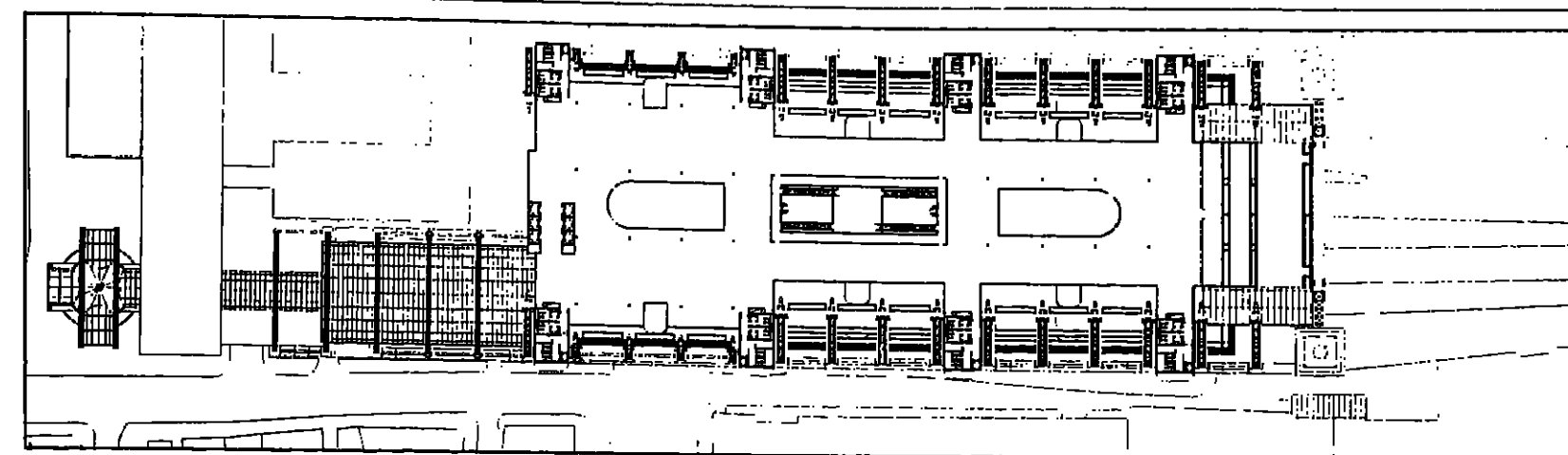
Feilden has found the user group to be helpful in exchanging ideas and advice, and is impressed particularly with the work of the East Anglian Regional Health Authority, who have been able to install Autocad in a thorough manner, not being constrained by the same budget and time limitations of a small practice. This is noticeable for instance in time spent methodically recording components for future use, which is essential if you are to get the best out of any CAD system. The user group still numbers less than 150 in this country, of which less than 30 are private architects. Hardware varies from company to company.

Those who seem to be doing best are the services engineers, for whom such software was originally written, and it was apparent from the work done by Russell & Feilden that the ability to overlay electricals and produce selected plans of the same in colour is the most effective output so far that I saw, together with some useful (if not pretty) layouts and 2-D projections for internal planning.

Architects, though a small grouping within the user group, are quite active in organising the user group. Alan Ray-Jones of RIBAS is Membership Secretary, and the former chairman Philip Keevil (of Keevil and Gregory, Northampton) has just set up his own company, Applied CAD Services Ltd, both to sell Autocad and provide training and backup services. These are collectively marketed as Soft Pencil (full workstation £18,500) and Mini Pencil at £8,500. The company will also provide separate training and are selling a range of fonts and database components for between £15 and £125.

Feilden is philosophical about his experience to date, and puts the expense down to a necessary learning curve which everybody will need to go through in the next few years in one way or another.

Autocad User Group: varies by region. Alan Ray-Jones, RIBAS 01-437 8991. Applied CAD Services Ltd, 14 Billing Road, Northampton NN1 5AW. Telephone: 0604 20093.



Computer-generated drawing of SBT's design for offices over Cannon Street station in the City.

## GDS trouble shooters

SCOTT Brownrigg & Turner (SBT) were one of the first users of GDS (Graphics Design System) in a private practice and have been one of the trail-blazers of CAD.

Trail-blazing is a two-edged sword, as one of their partners Chris Blow described. On the one hand you are using the latest technology and so have a lead; on the other hand you are having to find out how to use the system successfully and put up with the birth pangs both of software and hardware.

After six years of using GDS on Tektronix equipment, that had become obsolete within two to three years of purchasing the system, SBT have recently re-equipped both their London and Guildford offices with seven intelligent colour terminals by Ramtek (4225), which are compatible with the latest Tektronix equipment, but have cost advantages.

Their other benefit is that the new terminals control a local memory, which memorises a portion of the total building model taken from the central Prime mini-computer. This allows for far faster redrawing of the building section being worked on.

The Ramtek stations also have the benefit of interfacing with graphic pads containing instructions held in iconic form. This has by all accounts greatly speeded up entry and learning times, and brought the user interface up to the level of other comparable systems in this respect. Colour has helped by differentiating between elements and components, as well as recognising recent additions. The new hardware has also enabled the generation of sophisticated solid modelling.

An important feature of re-equipping has been to keep the SBT staff happier, and reduced the temptation to go off and work for others on newer, more sophisticated equipment. It is known that the major cost of a system is in training time and the loss of a trained employee is a capital loss. SBT, having clocked up in excess of 80,000 hours, are philosophical about having trained a number of people who then moved on to run other architect's CAD systems. Until there is a substantial pool of computer-literate architects this will be inevitable, though I have not yet heard of any "golden hellos", and architects tend to maintain a facade of beneficence towards their competitors.

SBT are planning to apply modern communications technology. This involves using a Kilostream link between their Guildford offices and their London office. This, according to Blow, will be of enormous benefit not only since both offices can work on one building model, but also since it should be necessary to upgrade only one lot of software. Terminal 4 at

Heathrow has been for some time the showpiece scheme carried out using GDS, but they have been moving on with a series of schemes for Digital Equipment Co.

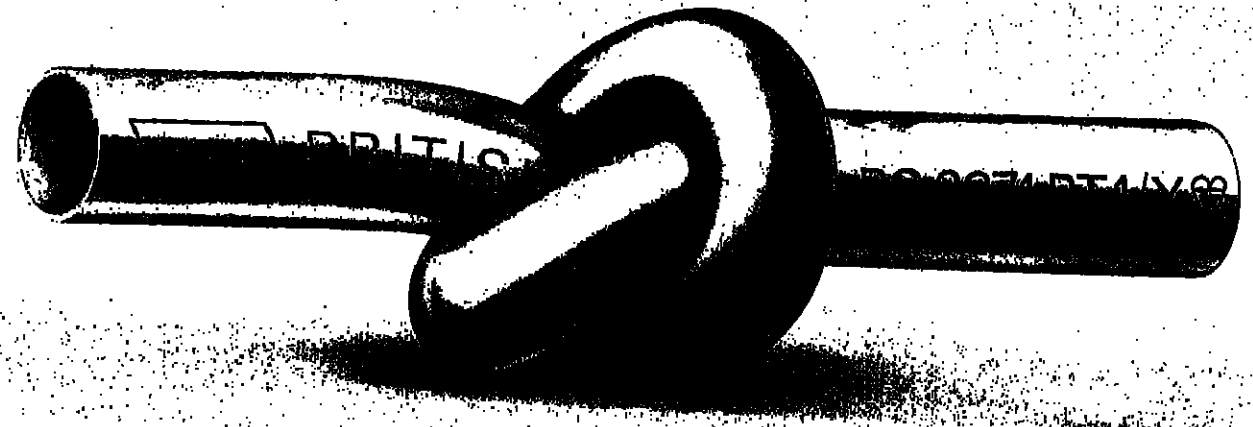
Like Steve Race (of D'Arcy Race), Blow feels that the move from ARC (Applied Research of

Cambridge) to McDonnell Douglas has resulted in a loss of service. Whereas before the buy-out Scott Brownrigg & Turner received personal attention from a close-knit team of boffins, now when they ring up nobody knows who they are! Perhaps Blow's position as

chairman of the RIBA Computer Group may have some effect, though he himself is pessimistic. It is quite clear as most of the major systems are reaching comparability in terms of performance, that the main criteria for choosing a CAD system (just like choosing an architect) is an

evaluation of the support and after-sales service offered and even the largest company should pay attention.

Allison Bromlow, Scott Brownrigg & Turner (0483) 68686. Steve Scarce, Ramtek UK (0256) 499541. Paul Purvis, Datadraw, 01-379 5958.



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## Sow's ear to a silk purse

Chris Higgins of Plincke Leaman & Browning relates his practice's experiences in setting up a computerised office management system.

THIS is the story of Plincke Leaman & Browning's search for an office management system and how it led them to an unlikely conclusion.

On the way they met some odd experiences, some frustrating, some hilarious.

PL&B are a practice of some 28 staff based in Winchester, Hampshire. Although they are primarily consultant architects, they also run a project management service and two of the partners are qualified in other disciplines; one being a quantity surveyor, the other a construction manager.

A few years ago the firm was expanding fast and the project management partners recognised the need to introduce a reliable office management system (probably computerised), to improve the efficiency and profitability of the firm. The needs were identified as follows:

- To know the real costs of running the firm.
- Which projects made profits or losses.

- Identifying loss-making early enough to remedy a problem.
- When fees were due.
- The instant calculation of work in progress whenever was required rather than the auditors arrive at the end of the financial year.

The partners also wanted means of knowing the implications of certain management decisions, such as how the review would affect overhead costs, or the effect of a professional indemnity premium when spread over its hourly rate for each member of the office.

So the aim was to find a system to provide all the answers at the push of a button to ensure the right management decisions.

The big questions for some one knowing almost nothing about computers were which system? and what hardware? The choice of computer system to the layman is like a maze.

PL&B initially got it all wrong. With so many systems to choose from, they opted for

## Computers

Apple III (because many architects seemed to favour the Apple, supplied by a local dealer for the convenience of after-sales service. Unfortunately, it was obsolete within six months and, although the subsequent Apple Macintoshes are no doubt very good, PL&B now suspect that many architects had chosen Apples because of their good design image and an excellent logo rather than for their specific performance). The upshot was that the local dealer was only able to supply a few basic spreadsheet sheets, and he went into liquidation shortly after the purchase.

But in starting to use any system at all, PL&B began to become computer literate and learn from their initial mistakes.

A standard word-processing package was acquired at the same time which was very successful, but it was soon recognised that it would be even more efficient on more powerful hardware.

An IBM PCXT was purchased and dedicated to word processing. Although supplied by a different dealer, the industry was fraught with insecurity and he too went into liquidation soon afterwards. However, this was clearly the right package to cope with the needs of the practice, they still needed the ideal management programme to help control their performance, their cash flow, and analyse their efficiency and profitability.

At that time it was still a difficult dilemma — they could buy a standard package but would it really do what they

wanted? The alternative was a purpose-written set of software, but the cost would be phenomenal (and even then with no guarantee of eventual performance).

Still learning, PL&B went to various seminars and demonstrations looking at all the ready-made systems on the market. It was difficult here to judge how many slick salesmen were better than their product, or how many clever computer boffins might have had the right answer.

Clive Houghton, one of PL&B's management partners, looked at every system he could find on the market. After several months he concluded that a system called Prophet came closest to our brief. It was being developed by Nigel Charlesworth, a computer programmer who had previously practised as an architect. He had the bones of a very good system, but had neither the resources nor the presentation to complete the development or market it professionally. Despite being slightly chaotic, he was clearly a clever programmer and the decision was made to become one of his first customers.

Although PL&B were pleased with Prophet, it clearly needed a lot more work to perfect it, and it was not long before Houghton and Charlesworth had fallen into a working partnership in which PL&B became Charlesworth's guinea pig, providing user feedback during the development trial period. Houghton analysed any weaknesses in the system and Charlesworth responded by rewriting the programme.

If they had known the sheer effort and time involved, they might never have started.

Almost two years later the redevelopment of Prophet had been refined to a point where PL&B were delighted with it. It had been created to suit the demanding needs of a thriving medium-size practice; it was rewritten in a powerful computer language called Pascal, and capable of running on each of the commonly adopted computer operating systems, MS-DOS or CPM. In theory it would now be possible to run Prophet on almost any contemporary computer, although it was really aimed for IBM, or IBM compatible; subject only to the hardware having the capacity to operate the programme (a minimum of 256k ram internal memory plus a 10 megabyte hard disk).

There was now great satisfaction at this achievement, as the system was thought to be the most powerful and comprehensive on the market, but the time and costs incurred in development had been enormous. Over this time the working relationship between PL&B and Charlesworth had grown into the formation of a new company intended to support him in launching and marketing the new improved Prophet system and to give PL&B, who had backed it, some security.

The system was now working well and had the benefit of some two years of development trials behind it, but neither PL&B or Charlesworth had any marketing experience. At about this time Stephen Alsford, a univer-

sity friend of Charlesworth who had been a marketing director of a multi-national company, expressed an interest in the consortium was formed to fund and launch the new company.

The partners of PL&B offered a prize within the firm for anyone suggesting the best name for the new company; only to be a little embarrassed when the winning suggestion came from one of the partners, John Browning, who proposed The Silk Purse Company.

Looking back on the whole experience, PL&B are certain that every practice could benefit from a computerised office management system, and their advice to other like-minded firms is as follows:

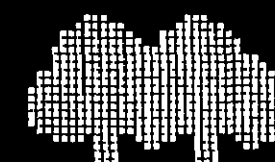
- Carry out your market research carefully.
- Assess what you need before you go too far.
- Avoid over-sophistication or too many changes.
- Be sure that the system will serve you and your practice won't become a slave to the computer.
- Consider the suitability of the software and subsequent user support.
- Ensure that hardware is fully compatible with software.
- If you don't already use word processing, this could usefully be considered at the same time.
- It takes time to get it right, but the commitment will pay dividends.

Further information is available from The Silk Purse Company, 5 The Square, Winchester. Tel: (0962) 63603.

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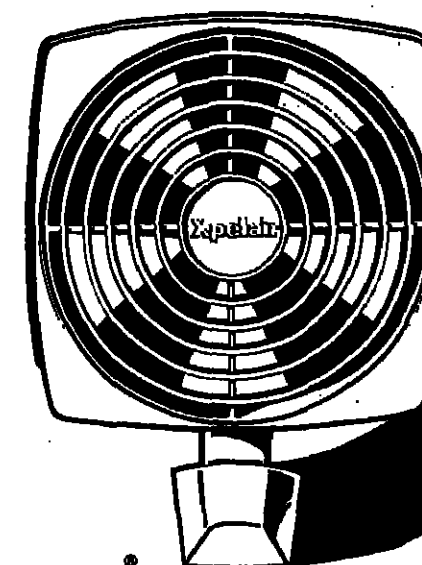
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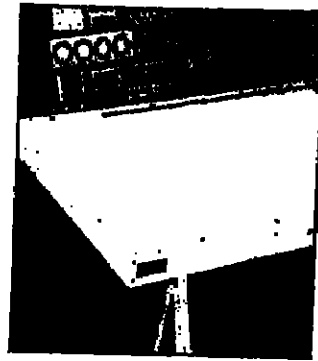
## New products

Compiled by Harold Hudson

### Back-lit draughting

**STABLE** for graphic, architectural and engineering applications, a range of backlit draughting tables has been introduced by GM Technical Services. In sizes from A0 to A4—the two larger sizes available mounted on stands—these draughting tables include a green filter to ease eye strain and a dimmer control to adjust the back lighting levels. There is provision for the fitting of parallel-motion draughting machines.

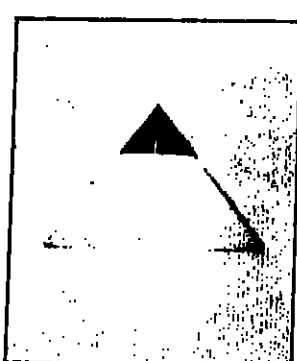
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### Glass luminaires

MARLIN has been appointed the exclusive UK distributor for Glashütte Limburg luminaires. Limburg is well-known for its high-quality glassware and this is reflected in the fittings which are now available from Marlin. In all some 1,300 varieties of fittings are included—uplighters, downlighters, pendants, ceiling lights, wall lights and table lamps. Six different types of glass are used and a number of different metals, including die-cast brass, die-cast aluminium, zinc and bronze.

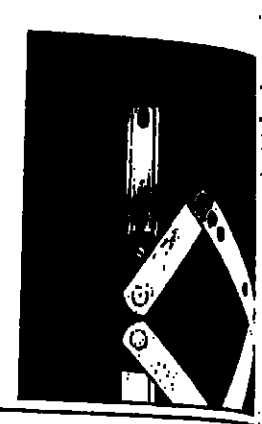
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### Friction hinges

LARGER, heavier windows are made possible if the robust Defender friction hinges from SecuriStyle are used. Smooth operation, accurate location, a weatherproof fit and an airtight seal—these are the qualities claimed for this in-house designed and built device. Off-the-shelf delivery is promised. SecuriStyle has recently become a firm of assessed capability under the BS1 quality assurance scheme.

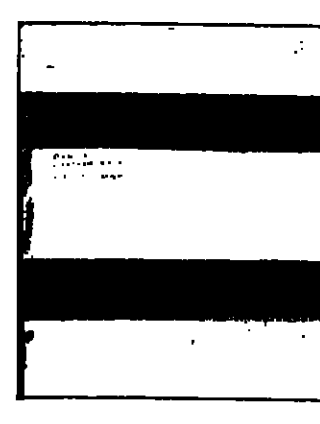
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### Exterior fillers

A TWO-year exposure test carried out by ICI's research and development department showed that its Weathershield Stopper is the most durable. Holes and channels were cut, filled using various proprietary makes of filler, rubbed down and given a coat of gloss paint. ICI claims that the success of its product is due to an extruder based on silica micro-spheres and a special resin which allows the stopper to expand or contract with the moisture content of timber.

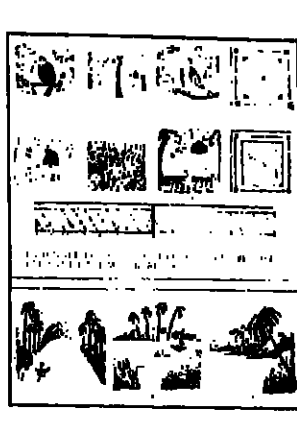
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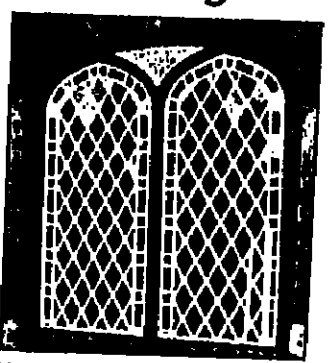
### Wall tiles

HAND-PAINTED tiles from a factory in Burgundy, France are the latest additions to Tile Mart's London outlets. They are the sole UK stockist for the original tiles which have plain white or coloured options. The picture tiles depict animals, fruit, flowers, Pacific islands and French kitchen scenes.

Enter 116 ON EXPRESS ENQUIRY CARD



### Leaded lights



NORTH Western Lead offer to replace the appearance of ancient leaded lights. This company manufactures Decra-Lead, brilliant white self-adhesive lead strips which it sticks to both sides of the outer pane of a sealed double-glazed unit, thereby replacing the appearance of the old window, but adding the benefits of double-glazing. The white UV-cured polyester finish is said not to require painting for many years.

Enter 103 ON EXPRESS ENQUIRY CARD

### Roofing texture



TARC Tiles claims that its classic single lap concrete roof tile, with its mixture of angular and curved profiling, imparts to pitched roofs a texture which is quite distinctive. Most such tiles have curved profiles, producing roofs reminiscent of ones covered with traditional tile patterns, such as pan tiles and Roman and Spanish tiles. Others have very square profiles. Tarc Classic tiles lie somewhere between the two extremes.

Enter 104 ON EXPRESS ENQUIRY CARD

### Water coolers



ROUND-THIE-CLOCK cool drinking water can be supplied by Maestro Water Coolers' duty coolers—the MAJ-20. These units deliver 10 gallons of water, cooled to 10degC, every hour. Both are plumbed in and can be supplied with a filter arrangement, if desired. They carry a 12-month warranty and are said to have been developed with long, trouble-free life in mind.

Enter 105 ON EXPRESS ENQUIRY CARD

### Sheltered security



TWO additions to the Best masterkey/removable core system are intended to make life easier for the elderly or handicapped. The Best key has an enlarged key-bow to make it easier to grip and is available right across the range. The Best SP4 Union oval conversion cylinder features a 500mm turnbar. The turnbar is operated by pulling down rather than rotating which is often difficult for the elderly.

Enter 117 ON EXPRESS ENQUIRY CARD

### Resistant lighting



PRACTICAL and attractive, Cameo light fittings are available from Osram GEC in round or square models. The bodies and diffusers are both made from polycarbonate giving weather and vandal resistance. The illumination is provided by two energy-efficient 9W Osram fluorescent lamps. The square Cameo is available with two 11W Osram lamps, each running on separate ballasts.

Enter 118 ON EXPRESS ENQUIRY CARD

### Water level

ENABLING complicated levelling operations to be carried out by one man, the new water level from Akwamasta can be used to set pegs for foundation concrete, positioning shuttering, floor joists, wall plates etc., or setting out second-fix items. The operator can work around obstructions, transferring levels from one room to another. What is more, the Akwamasta is easy to carry, will withstand rough site use and has very little that can go wrong.

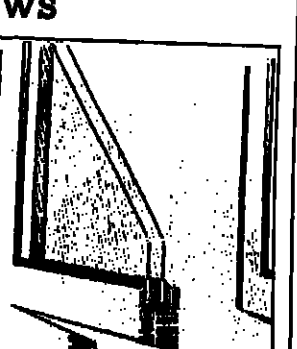
Enter 106 ON EXPRESS ENQUIRY CARD



### Aluminium windows

DESIGNED for the lighter commercial sector of the market, Schuco's Isotherm 50 system of aluminium windows has narrow profile widths (50mm) and is available in side-hung, outward opening and tilt-turn formats. Its anodised or polyester powder coated profiles are joined by a hard pvc insulating bar. The Isotherm 50 range accepts friction system fittings, including Schuco system outward opening casements.

Enter 107 ON EXPRESS ENQUIRY CARD



### Vinyl tiles

REPRESENTING the move Marley Flats has made into the medium-priced sector of the vinyl floor tile market, the new Cortina Designer range allows specifiers to create their own exclusive designs. These customised tiles combine six attractive, colourful designs. Because the pastel colour chip pattern is evenly distributed through the thickness of each tile, Cortina tiles retain their life, even in heavily trafficked areas.

Enter 108 ON EXPRESS ENQUIRY CARD

### Lighting

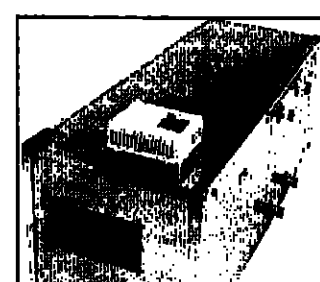
THE Manhattan is a wall-mount uplighter just released by Design Carvill Ltd of London. Finishes a combination of brass and chrome or satin black, the light is available with tungsten halogen bulb, GLS bulb or with a GLS-11 Fluorescent glass bulb. Design Carvill makes large range of lighting but specialise in designing and manufacturing uplighters.

Enter 109 ON EXPRESS ENQUIRY CARD

### Air conditioning

A NEW range of six air handling units is being manufactured by Osmat Engineering. The Kennard Compact models are made of 25mm-thick insulated panels mounted in an extruded aluminium frame and contain a variable speed fan. Providing heating, cooling and filtration the units are capable of handling air volumes between 0-1 and 2-4 m/sec.

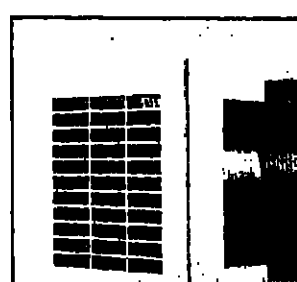
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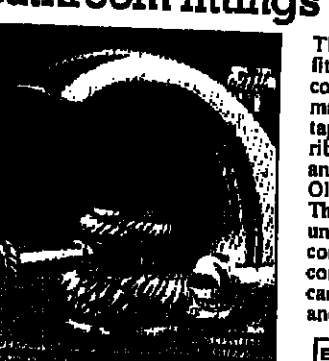
### Ventilation

MORE efficient extraction of condensation and odours is given by the new Stimline fans from Aidelle. Designed to discharge air directly through an outside wall, the fans incorporate a mixed flow impeller to cope with all predicted demands and a magnetically retained flap to prevent draughts blowing back into the room. The basic SLF model is operated by a pull cord but the SLFT can be switched on with the room light.

Enter 120 ON EXPRESS ENQUIRY CARD



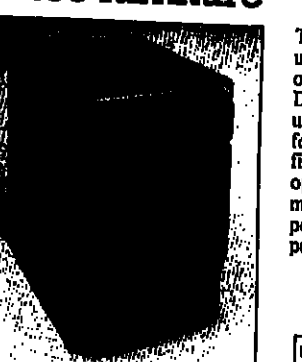
### Bathroom fittings



THREE new suites of bathroom fittings have been added to the collection of bathroom accessories made by Regency. Delphic mixer taps are distinguished by rope or ribbed patterns on the level handles and pop-up knob while the Olympic suite has curved handles. The Pavilion taps are operated by unusually shaped handwheels and contrast with a classically contoured spout. All three suites can be bought in chrome gold or polished or brushed nickel.

Enter 110 ON EXPRESS ENQUIRY CARD

### Office furniture



THIS brightly coloured storage unit and combined work surface is one of a new range from Sheraton. Designs Ltd. The moulded pedestal unit can be ordered with two or four drawers and a suspended filing facility, casters are optional. It comes in hi-gloss or matt coloured finishes. It is possible to lock a line of the pedestals together.

Enter 111 ON EXPRESS ENQUIRY CARD

### Lightline



A VERSATILE new tubular fluorescent lighting system has been launched by Marlin Lighting Ltd. The two models, Lightline I and II, can be installed in any pattern to live up a ceiling. They are available in matt white or black and a colour service range. While steel or black plastic snap-in louvres and clear plastic covers are offered for Lightline I as well as track spotlight options. Lightline II has a new, more visible reflector profile.

Enter 112 ON EXPRESS ENQUIRY CARD

If you would like further information concerning the products on these pages, please fill in and return the pre-paid reader enquiry card.

### Washrooms



KEEPING washrooms clean and hygienic is the aim for a range of products from Kestrel Services. The Clear soap dispenser will deliver individual leafs of soap as required which dissolve completely and instantly with water to eliminate scum from the wash basins. The wall-mounted unit has a chrome-plated outer case bearing a plate with clear user instructions. It is supported in the package by a combined hot air drier/paper towel dispenser.

Enter 121 ON EXPRESS ENQUIRY CARD

### Roofing and cladding



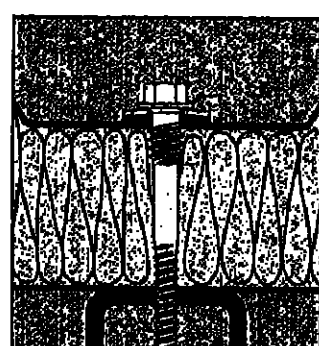
ROOFING and cladding materials from Eternit TAC are detailed in a new booklet. Panoramic colour photographs of the products in use are augmented by inset pictures of the rings. Duraform and Eternit 2000 asbestos-free formulations are included in the text on slates and the company's profiled sheeting and rainwater goods are also shown.

Enter 127 ON EXPRESS ENQUIRY CARD

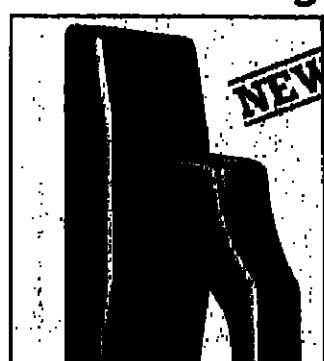
### Fastenings

DATA sheets for four of their new fastenings have been produced by SFS Stedler to help the specifier decide on the correct product for the task. The sheets concern the Liner panel fastening system; the Sola Mark II self-drilling and self-tapping fasteners; the SFC fibre cement fasteners and the recently developed SDC composite fastener which comes in seven lengths and incorporates a threadless section of shaft to avoid overtightening.

Enter 128 ON EXPRESS ENQUIRY CARD



### Window fittings



ONE model of handle now fits the entire range of Schuco upvc windows and therefore brings savings in manufacturing and stock-holding requirements. The mechanism is integral with the handle casing so avoiding machining of the frame. The handle and the rest of the universal fittings are illustrated in a leaflet available from the firm. The leaflet is entitled *From Schuco: The fittings of the future*.

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## New products

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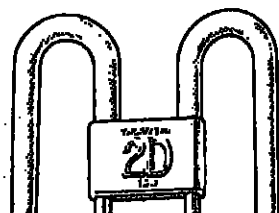
### PROPOSITION TWO

**A** Let 2D equal greater choice.

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**C** Add to the range the new 38 watt lamp.

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**E** Prove that 2D is ideal for a wide variety of applications.

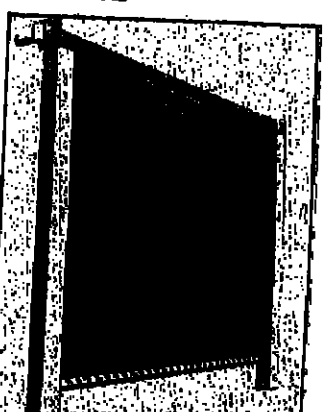
Better still, phone Dana Taylor on 01-983 6363 and we'll send you a free cost saving calculator to work out exactly how much your client's will save and a free brochure to select the 2D luminaires to meet each client's specific requirements.

Q.E.D.

THORN EMI 2D

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### Doors



DESIGNED for high use cycle applications such as factory compartments this variable speed door from Energy Doors Ltd is operated by a push button, radio control, radar or induction loops. The polyester/oprene curtain will be raised and lowered in a pre-set cycle to cut heat loss and the safety feature of a pneumatic pressure pad built into the bottom obviates the risk of operatives being caught.

Enter 114 ON EXPRESS ENQUIRY CARD



Enter 113 ON EXPRESS ENQUIRY CARD



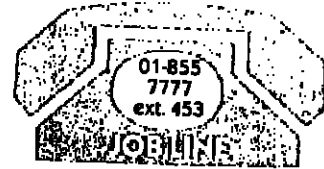






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Applicants may be those seeking to qualify, to which all necessary assistance will be given, or those with relevant experience. You will be required to run your own jobs and encouraged to play a leading part in major projects.

The Division which encourages a multi-disciplinary approach to its work has responsibility for a large rehabilitation, maintenance and improvement programme to the Council's 62,000 property housing stock.

All these posts are demanding and challenging, requiring a flexible and innovative approach, and in return offer prospects for job satisfaction. The wide scale and scope of the work offers good career development opportunities to applicants working towards a professional qualification.  
Southwark is an equal opportunity employer. Applications are welcome from candidates regardless of sex or ethnic origin and from registered disabled persons.  
Telephone 01-701 2870 or 01-708 1954 (24 hour answering service) for an application form, or write on a postcard to The Personnel Officer, London Borough of Southwark, 25 Commercial Way, London SE1 8 6DS.  
Please quote appropriate reference number and job title. Last date for receipt of completed Application Forms 5.11.86.

At the request of advertisers, readers are asked to refer to Building Design when replying to advertisements on this and other pages



# APPOINTMENTS

## BTP

ARCHITECTS  
Architects & Technicians  
BRISTOL

BTP is a small, self-contained practice which enjoys the backing of the MWT Group. We operate from attractive offices overlooking parkland in the university area of Bristol and our workload is expanding at a very satisfactory rate. We need to recruit more young architects and technicians with design skills and some job running experience to whom we can guarantee pleasant working conditions, generous terms and job satisfaction.

Please telephone  
Bristol (0272) 277453  
or send your C.V. to  
BTP Architects  
3 Berkeley Square,  
Bristol BS8 1HL

### UNUSUAL OPPORTUNITY

Following the success of the Architecture Shop in Hampstead Garden Suburb, David Baker Architects are looking for an Architect with around 3 years post-qualification experience to help set up another Architecture Shop in West London. Applicants should live within 30 minutes drive of Ealing Common and have an enthusiasm for accessible architecture.

Please write to:  
David Baker RIBA, 3 Tyntton Road, London N2 0DW  
Tel: 01-455 8388

### PERCY THOMAS PARTNERSHIP

QUALIFIED ARCHITECT  
with several years experience  
QUALIFIED ARCHITECTURAL  
TECHNICIAN  
also with several years experience

**NEWLY QUALIFIED ARCHITECT**  
To work on a variety of interesting commercial, health and refurbishment projects some of which are in conservation areas and require a sensitive appreciation of the existing urban fabric. These posts are for permanent staff and offer excellent career prospects. There is a lively and congenial working environment in modern air conditioned offices. Good salaries will be paid to applicants showing exceptional ability.  
Please write to me quoting ref AI with samples of your recent work, an account of your aspirations and capabilities and a CV.

John P B Gilmore  
Percy Thomas Partnership  
Civic House, 156 Great Charles Street  
Birmingham B3 3HN  
Tel: 051 233 4474

County of  
Cleveland

PLANNING DEPARTMENT  
Re-advertisement

### TECHNICAL OFFICER (Environment)

CX123 £7,311-£10,184

A keen, enthusiastic Technical Officer is required to work in the Environment Group of the Development Division of the Planning Department.

The person appointed will be a member of a team of eleven responsible for the planning, design and implementation of a wide range of building refurbishment and environmental improvement projects throughout the County. The person appointed will have special responsibility towards a scheme of enhancement works relating to run-down industrial and commercial sites which the County Council, in co-operation with private landowners, is anxious to improve.

The position would be suitable for someone who has sound knowledge and experience of building construction and who has the ability to draw up schemes of improvement and supervise their implementation.

The appointment will be made within the salary range shown, according to qualifications and experience.

Assistance with removal and relocation expenses will be provided in approved cases. Temporary housing accommodation may also be available within the County area.

For an application form and further details please contact Greg Watson on Middlesbrough 248168, ext. 2422 or write to the County Planning Officer, Gurney House, Gurney Street, Middlesbrough, Cleveland TS1 1QT.

Closing date for applications is 28th November, 1986.

We are an equal opportunities employer. Job sharing arrangements will be considered and all applicants who have the support of the Disabled Resettlement Officer will be given an interview.

At the request of advertisers, readers are asked to refer to Building Design when replying to advertisements on this and other pages

HOLFORD ASSOCIATES  
require immediately

### AN ARCHITECT

to work on an interesting project in the London Docklands. Applicants should be able to demonstrate proven technical ability and be capable of working on their own initiative.

CAD experience an advantage  
Please write with C.V. to  
Trevor Powell  
Holford Associates  
Falmington Chambers, 110 Upper Thames Street  
London EC4R 3TJ

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### ADVERTISEMENTS

Value Added Tax will be chargeable at the standard rate (18%) on all advertisements. This tax can be reclaimed by all VAT registered companies from H.M. Customs and Excise.

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INTERIOR DESIGN  
GRAPHIC DESIGN  
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To co-ordinate and manage our rapidly-expanding shopping centre activities as a key member of an energetic team.

### CREATIVE ARCHITECT/DESIGNER

To develop a role as a senior creative force within our existing team of retail and leisure designers.

### PROJECT ARCHITECT

To join a busy team of project architects running jobs from £500k to £50m.

In all cases, proven track record and experience will be met by competitive remuneration and career prospects in this rapidly growing design group.

Applications in writing only to:

TOM BALL  
Chief Architect

McColl  
64 WIGMORE STREET  
LONDON W1H 0JL  
TEL: 01-2738250  
TELEPHONE 01-936 3788

### Brent Development Architects

### Practice Manager (Architect) — PO2B

The Construction Division of Brent Development is a multi-discipline design and property management service to the Council.

The professional sections work in Practice groups each headed by a Practice Manager and a vacancy now exists for an Architect to manage one of our Housing Practices.

We are looking for a professionally qualified person who has considerable senior level experience and can successfully undertake this leadership role. Working within tight programmes and budgets this post offers the challenge to maintain design standards and achieve targets, using and developing innovative techniques and approaches.

Opportunities exist to do work for voluntary sector clients, housing associations and other public bodies and there is an increasing new build workload.

Salary is in the range of £18,011 to £17,180 plus £1,183 LW and supplements.

Brent is an Equal Opportunity Employer. Applications are welcome from candidates irrespective of race, nationality, ethnic or national origin, age, marital status or gender and from lesbians and gay men and disabled persons. Job sharing welcome.

Application forms and job descriptions from the Personnel Division Room 1 Brent Town Hall Annex, Kings Drive, Wembley, Middx HA9 9BA returnable by 6th December 1986. Telephone 01-803 0371 (24 hour Answerphone service). Reference number D/10 must be quoted.

London Borough of  
**BRENT**

YORK ARCHITECTS  
require a young registered

### ARCHITECT

with an interest in old buildings. Must have drive and energy.

Apply in writing with CV to Richard Cam-Anchor  
FERREY & MENNIM  
12 Minister Yard, York YO1 5HJ

### LEEDS CITY COUNCIL DEPARTMENT OF PUBLIC WORKS ARCHITECTS SERVICES ARCHITECT/ARCHITECT'S ASSISTANT

REF B107  
S02 £11,804 to £12,297

Applications are invited from qualified Architects for this demanding post in a very busy architectural practice.

The successful applicant will be a member of a team of Architects and Technicians responsible to a Senior Principal Architect for a wide range of duties including:

- architectural work in the implementation of projects from inception to completion;
- the performance of duties as required by the relevant JCT form of contract (or such other form as the Council may adopt);
- working within the parameters of the Department's Financial Regulations and Standing Orders.

The successful candidate will be expected to demonstrate flexibility and a determination to ensure that the Division's high standards of work and performance are maintained. The Division is a user of computer technology to aid design and drawing production. Experience and interest in this field, while not essential, would be useful.

All applications must be made on a Public Works application form. These are available, together with further details, by writing and enclosing a stamped addressed envelope, to the Director of Public Works, Personnel Section, Department of Public Works, Sweet Street, LEEDS LS1 1SD.

Closing date: 1st December, 1986.  
"LEEDS IS AN EQUAL OPPORTUNITIES EMPLOYER"  
POST SUITABLE FOR JOB SHARING

## LESSER DESIGN & BUILD

### Architects

### Architectural Technicians

We require experienced Architects and Architectural Technicians to join our Design & Build team to assist in meeting the increasing demand for expanding workload, which is often repeat business from well known national and international companies.

Applicants must be able to demonstrate a proven ability to produce accurate work, with the minimum of supervision. In both instances you should be capable of running your own project keeping to programmes and controlling costs.

We offer competitive salaries, excellent working conditions and growth opportunities for increased responsibility and advancement. Please write in the first instance stating full career details to date and indicating salary required, or telephone for an application form to:

Jacky Fleming (Mrs)  
Personnel Officer  
Lesser Design & Build Limited  
The Causeway, Teddington  
Middlesex TW11 0HW  
Tel: (01) 977 8765

## PREMISES MANAGER

This is a new position reporting direct to the Property Manager designed to control and be responsible for all property and material aspects of the Society's Branch Office network throughout the U.K. and Eire.

Candidates will require to possess considerable experience, maturity, and ability to work on own initiative and be able to control a programme of repairs/maintenance/upgrading/fitting-out, budgeting, controlling works direct and through appointed professional staff.

A salary in the order of £12,500/£13,000 is offered, plus fringe benefits including annual bonus, excellent contributory pension scheme, concessionary mortgage facilities and relocation expenses where appropriate.

Write with full details to:— Personnel Manager,  
Royal Liver Friendly Society,  
Royal Liver Building, Liverpool L3 1HT.

ROYAL LIVER ASSURANCE

# APPOINTMENTS

## ARCHITECT (Registered)

Salary: S01 — P038, £10,569-£13,653

We require a highly motivated Architect with proven ability in design and project management for a key post within the Architects' Division. To join a team providing architectural services to an area of the County and in co-operation with other building professionals, operates in a multi-professional team co-ordinating the Council's property management services.

We operate a CAD Bureau and, in consequence, we would be interested in candidates offering expertise in, and enthusiasm for using and developing computers in architecture for which training may be provided.

Car loan facilities and re-location expenses will be available, as appropriate. The post carries a Casual User car classification.

For further details and application form, please contact the department of Property Services, Central Services Section (Staff Management), PO Box 26, County Hall, PRESTON PR1 8RE. Telephone Preston 263271.

Closing date: 28th November 1986

DO YOU KNOW THAT IN  
LANCASHIRE YOU CAN WIN A  
DINE & DIVE & CLIMB & GAMBLE &  
RABBIT & BIKE & HIKE & TOUR &  
TAN & SKI & SAIL & SWIM & SHOP  
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**Lancashire  
County Council**

An Equal Opportunities employer

### ARCHER BOXER PARTNERS

require immediately an

### ARCHITECT & TECHNICIAN

excellent opportunities and salaries for right personnel.

Telephone or write to:  
Cliff Saunders  
Archer Boxer Partners  
ABP House  
Salisbury Square  
Hatfield, Herts  
Tel: 07075 69001

### BOROUGH OF DARLINGTON

READVERTISEMENT

### BOROUGH ARCHITECT'S DEPARTMENT

### TEMPORARY ARCHITECT

S01/POA £10,569-£12,894 (Spinal Point 29-38)  
The Council is seeking to appoint a Temporary Architect for an initial period of six months to work on a variety of projects.

Applicants should be registered architects and have a minimum of three years post qualification experience.

Starting salary will depend upon experience.

Job descriptions and application forms are available from the Head of Personnel Services, Town Hall, Darlington DL1 5DU, (Telephone (0328) 380861, extension 318) to whom they should be returned by Friday 28th November 1986.

For further details telephone Mr C B Davison, Assistant Borough Architect, on extension 111.

DARLINGTON BOROUGH COUNCIL IS AN EQUAL OPPORTUNITIES EMPLOYER

### HOUSING DEPARTMENT

### Building Surveyors & Technicians

Up to £12,000 pa

We are seeking a number of experienced Building Surveyors or technicians for a wide range of interesting and varied projects in the housing repairs and refurbishment field.

The Housing Departments Maintenance Division have identified a massive programme of major repairs and improvements to its large panel estates and traditional housing stock.

In addition to this the division is also responsible for day to day repairs, vacant properties, services and external decorations contracts. The Division is newly established and rapidly expanding in terms of budget and responsibility. Promotional prospects are therefore very good. Although a relevant technical or professional qualification is desirable, experience, ambition and enthusiasm are qualities high on our list.

Closing date: 6th December, 1986. Please quote ref. K8398.

For further details and an application form contact The Recruitment Officer, Personnel Department, Town Hall, Forest Road, London E17 4JF (Tel: 01-531 8899 — 24 hour answering service).

AN EQUAL OPPORTUNITY  
EMPLOYER

Applicants are considered for their  
qualifications for the post regardless of  
disability, sex, race and marital status

**Waltham  
Forest**

## ARCHITECTURE

TEMPORARY PERMANENT TEMPORARY PERMANENT

### LONDON AND SOUTH-EAST 01-888-8889

ARCHITECTS	ASSISTANTS	TECHNICIANS
EC1/WC1 We require newly qualified Architects for many exciting opportunities with salaries to match. Call Now.	W1 If you are looking for genuine career prospects we have a prestigious firm ready to satisfy your demands. We await your call.	EC10/12,000 We have vacancies for experienced on-site Technicians to work on superstores, choose a temp or a perm start NOW!
EC4/W8 100 Runners/Project Architects. Design Specialists we need you now. Don't miss out phone today.	W8 We have vacancies for experienced on-site Technicians to work on superstores, choose a temp or a perm start NOW!	EC10/12,000 We have vacancies for experienced on-site Technicians to work on superstores, choose a temp or a perm start NOW!

Contact Bill Peacock in our London Office NOW!

### SOUTH AND SOUTH-WEST 0703-223511

ARCHITECTS	TECHNICIANS
Chichester Young architect is urgently needed for the well established practice to join in with their major projects.	Exeter If you're a technician living in Exeter, then you're in demand. With 14 urgent positions you simply can't afford not to find out more! Your career is at stake! Call now for immediate interview.
Reading If you've got experience in housing? Then this practice has the opportunity that you may have been looking for!	

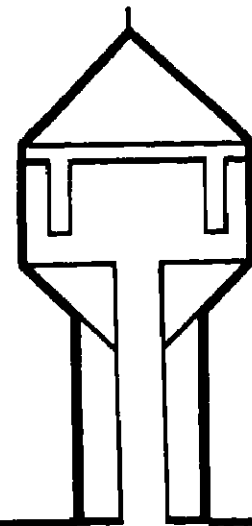
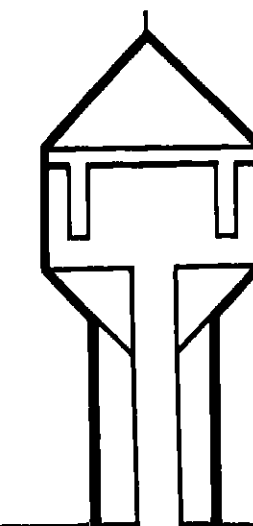
Contact Paul Hannan in our Southampton Office NOW!

**The career builders!** **Anders Glaser**  
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Personal Consultants

## YOUNG ARCHITECT

with design flair, able to take responsibility for all aspects of a variety of fast moving projects for prestige clients throughout the UK and offering considerable career potential for someone with drive and initiative.

Write with CV to:  
Pick Everard Keay & Gimson  
7 Friar Lane, Leicester LE1 5JD



## HOW DO WE CATCH YOUR EYE? HOW CAN WE STIMULATE YOUR INTEREST?

"Ealing's Architectural Division seeks well motivated staff to assist with a very large programme of Housing, Social Services, Community and Education projects."

"If you're into rectifying the housing problems of the 1960's, then you'll like us. We have the support of the community and other agencies to transform our housing estates into great places to live."

"Release is offered to long suffering, misunderstood, underpaid geniuses."

We currently require:-

### SENIOR BUILDING SURVEYORS/ARCHITECTS

£13,998 - £15,213 p.a. inclusive Ref: 976 AR

### ARCHITECTS/BUILDING SURVEYORS

£11,307 - £13,035 p.a. inclusive Ref: 977 AR

### ARCHITECTURAL/BUILDING SURVEYING ASSISTANTS

£7,344 - £10,902 p.a. inclusive Ref: 978 AR

You're all welcome ..... write now or initially call 01-579 2424 and speak to Ian McKechie, Assistant Borough Architect (Housing) Ext. 2510 or Michael Burrows, Assistant Borough Architect (Education, Social Services & General) on Ext. 2517. Closing date: 31st Dec.

Application forms obtainable from the Personnel Office, Room A/204, Town Hall Annexe, New Broadway, Ealing W5 2BY. Tel 01-840 1995 (24 hour service). Please quote appropriate reference. Ealing's new Council welcomes applications regardless of sex, race, ethnic origin, sexual orientation, disability or responsibility for dependants.

**Ealing**  
London Borough

# APPOINTMENTS

## ARCHITECTS & TECHNICIANS

for  
CITY OF LONDON  
Required with proven  
practical and design ability  
for a range of exciting  
housing and commercial  
projects.  
Send c.v. to:  
Unity Wharf  
Mill Street  
London SE1 2DD



We are an equal opportunity employer.

## HEDLEY GREENTREE PARTNERSHIP

### ARCHITECTS & TECHNICIANS

We continue to expand and again are looking for additional staff to join us in our award winning offices on the South Coast. We need at least two more qualified Architects with substantial experience and the drive and enthusiasm to see multi-million pound projects through to completion.

The range of commissions includes extensive marina and leisure complexes, prestige office headquarters, housing and business parks.

We are also looking for reliable and experienced Technicians with at least 3 years, and more, experience.

These positions offer long term employment in a practice that is currently handling some of the most exciting projects on the South Coast.

You should write in the first instance, enclosing examples of your best work to:-

Peter F Alchurch RIBA Dip Arch (Hons)  
Hedley Greentree Partnership  
Furze Hall Farm, Wickham Road  
Fareham, Hants PO16 7JH

## PERCY THOMAS PARTNERSHIP

### YOUNG QUALIFIED ARCHITECT

To work on a variety of small projects in the health field, offering scope for someone with design ability and initiative to carry out jobs through from inception to completion.

This post is for a permanent member of staff and offers career prospects. There is a lively working environment in a modern air conditioned office. A good salary will be paid to the applicant showing exceptional ability.

Please write to me quoting Ref A9 with samples of recent work, account of your aspirations and capabilities and a CV.

John P B Gilmour  
Percy Thomas Partnership  
Civic House, 156 Great Charles Street  
Birmingham B3 3HN  
Tel: 081 233 4474

### FARMER AND DARK

have openings for a

### SENIOR ARCHITECT with experience in industrial architecture and TECHNICIANS

with a minimum of four years experience.  
Please write with CV to Farmer and Dark  
131 Upper Richmond Road, London SW15 2TR

### DESIGN ARCHITECTS ASSISTANT ARCHITECTS

The practice has a number of new projects in the London area and is seeking staff with 3-5 years experience to work on schemes from concept design through to working drawings.

### INTERIOR DESIGNERS

A Designer with at least 10 years of varied experience of high quality work is required for the interior design section of the office.

Projects currently being undertaken include hotels and offices, supermarkets, higher educational buildings and refurbishment.

Please apply in writing, enclosing a CV to:

Liz Sanders  
John S Bonington Partnership,  
Tyttensanger House, St Albans, Herts AL4 0PG

## MALLA ARCHITECTURAL VACANCIES

QUALIFIED ARCHITECTS — WOKING £18K+Car  
Industrial/Commercial projects

QUALIFIED ARCHITECTS — DARTFORD £NEG  
Various housing projects

QUALIFIED ARCHITECTS — CAMDEN £15K  
Commercial projects

SENIOR TECHNICIAN — FULHAM £10-15K  
Historic buildings, grades 1 and 2

SENIOR TECHNICIANS — FULHAM £9-10K  
Historic buildings experience

QUALIFIED ARCHITECTS — SW8 £15-18K  
Various commercial projects including refurbs

These are just a small cross-section of our current vacancies. We always require qualified architects and experienced technicians. Call Mike Shaheen to discuss your prospects for the New Year.

Malla Architectural Appointments  
334 Euston Road, London NW1 3BG  
Tel: 01-387 1043 Fax: 387 8312



Malla Architectural Appointments  
334 Euston Road, London NW1 3BG  
Tel: 01-387 1043 Fax: 387 8312

David Wilson Homes (a member of the A H Wilson Group) have the following vacancy:-

## ARCHITECTURAL TECHNICIAN

Applications are invited for the above position in the Design Department situated at our Head Office in Ilstock.

The successful applicant will be involved in the preparation of estate layouts, feasibility studies and land purchase schemes together with other aspects of work associated with a large developer.

Applicants will be aged 25-35 years, qualified to HTEC and have an applied knowledge of housing layouts.

This is an exceptional opportunity to join a progressive and expanding company providing "in-house" design and engineering support.

For further details please write enclosing a current C.V. to:-

Mrs L Killick, Personnel  
Administrator, A H Wilson  
Group Limited, Leicester Road,  
Ilstock, Leicestershire



Agencies need not apply

## MANAGING DIRECTOR ARCHITECTURE AND INTERIORS

Conran Design Group is one of the leading design consultancies in Europe with over two hundred employees operating from studios in London and Paris.

The Architecture and Interiors Division comprises a team of forty architects, designers and other specialist staff working on a wide range of design projects including airports, shopping centres, retail chains and leisure complexes.

Due to the impending retirement of the present Managing Director we want to appoint a highly qualified executive to manage this important division and join the senior board of the company.

The successful applicant will be a strong leader with a sound knowledge of architecture and design. Experience in the management of major projects and in all aspects of client communication are essential and candidates must also possess well developed personnel, organisational and administrative skills. Salary and other company benefits will be commensurate with the importance of this appointment.

Please write with a full CV to Peter James, Chief Executive, Conran Design Group, The Heal's Building, 196 Tottenham Court Road, London W1P 9LD. Applications are required by 28 November 1986.



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# APPOINTMENTS

## stirling

RECRUITMENT CONSULTANTS

DO YOU NEED A CHALLENGE?  
PROJECT MANAGERS ARCHITECTS ASSISTANTS TECHNICIANS  
INTERIOR DESIGNERS

THEN READ ON...

Young Project Manager to work on commercial/office developments with exciting and job running ability.

Senior Architect required for this large architectural concern. To take section over and head a small team on commercial and industrial new build and refurbishment schemes.

Min 2 yrs experience for residential and commercial projects. Some supervision involved and ability to carry developments through to building application stage.

Interior Designers at all levels needed for consultancies in London and the Home Counties. Knowledge of exhibition design, visualising and CAD techniques beneficial.

For your next career move contact us in confidence at:  
44 Richmond Road, Kingston, Surrey KT5 3EH Tel: 01-549 3720

## Darbourne & Darke

2 PROJECT ARCHITECTS required for major commercial projects a minimum of 7 years experience required as a Senior Architect designing and controlling large scale prestige developments. Candidates must be able to demonstrate ability to handle schemes from inception to completion.

TECHNICIANS also required, with a minimum of 5 years experience to prepare production drawings and information for contractors. Applicants will need to illustrate their technical knowledge and drawing competence.

6 The Green Richmond Surrey TW9 1PL

## ARCHITECT/ ARCHITECTURAL TECHNICIAN

required for expanding and progressive development company based in W1 but active in all parts of Inner London. Experience of planning procedures in all London areas is essential as is the ability to work under pressure and to use own initiative.

In return we offer:  
The opportunity to join a young active team.  
Competitive remuneration.  
Full professional support and back-up.  
Long term prospects with a growing company.

Apply in confidence with full details to:  
Inner City Estates (London) Ltd.  
8 Harcourt House  
19a Cavendish Square  
London W1M 9AD

## SWINDON

An equal opportunities employer

The Borough of Thamesdown, noted for its fast expansion, covers Swindon and the surrounding districts and offers an excellent choice of town or country living, a thriving modern town centre and ease of communications. A generous scheme is available to help relocation to this attractive part of Wiltshire and the chance to work with one of Britain's most progressive authorities.

Environment and  
Technical Services Group  
ARCHITECTURAL SERVICES DIVISION

We have a continuing workload of new community, leisure and sports buildings and sheltered housing complexes for the elderly. To maintain and develop the expertise of our team we are now seeking the following staff to join the practice.

### Project Architect

(Ref 08-338)  
Scale £8,391-£12,297

To design, implement and supervise building projects under the direction of the Group Architect. Above average design ability and the potential to organise building contracts are essential. Minimum qualification RIBA Part II or equivalent.

### Architectural Assistant/Technician

(2 posts)  
(Ref 08-332; 08-322)

Scale £6,806-£9,216

To assist design architects in the preparation of scheme design, their supervision on site and all aspects of our unified workload. Minimum qualification ONC or equivalent.

Closing date: 28 November  
Application forms/further details available from The Personnel Officer, Thamesdown Borough Council, Civic Offices, Swindon, Wiltshire SN1 2JH. Tel: (0793) 810202 (24 hour answering service) quoting job reference number.

We welcome applications irrespective of race, sex or disability.

BOROUGH OF  
THAMESDOWN

## CLERK OF WORKS

THE FITZROY ROBINSON PARTNERSHIP require the services of an experienced CLERK OF WORKS for a project at Crawley in Sussex. The successful candidate will have experience of fast track construction, steel framed, fully air conditioned structures, and be available within one month/six weeks for a period of approximately 17 months.

Salary by negotiation.

Permanent or self employed arrangements considered.

Please write, in confidence, to:

The Personnel Assistant  
The Fitzroy Robinson Partnership  
77 Portland Place, London W1N 4EP

## SIMON CONDER ARCHITECTS AND DESIGNERS

require

talented Architects with at least 3 years post graduate practical experience, preferably in building and interior projects, to join our young and committed multi-disciplinary office with challenging and expanding workload.

Send CVs to Simon Conder,  
The Old School House, 68 Leonard Street,  
London EC3A 3QN

## Senior Architect

Specialist Design Team  
Process Industry

John Brown Engineers & Constructors at Portsmouth has an international reputation as a leader in the field of engineering contracting for a wide spectrum of the process plant industry. Our increasing involvement with pharmaceutical (both primary and secondary) and food process industry projects with their emphasis on clean rooms and controlled environments, has created a need for the skills of an Architect. Reporting to the Chief Civil Engineer, this person will provide a key contribution to our multi-discipline teams and will be involved at all stages of specification and design, from conceptual plans through to final acceptance.

The variety of work and technical interest will appeal to Chartered Architects in their mid 30s experienced in such specialist building design and with the confidence necessary to deal professionally with clients and local authorities.

A competitive salary and benefits will be provided, including relocation assistance where appropriate.

Interested? Contact Barry Lovell, Personnel Manager on 0705 822300 for an application form. Alternatively, write to him with full career details at John Brown Engineers & Constructors Limited, 1 Buckingham Street, Portsmouth, Hants., PO1 1HN.

Engineering & Construction

JOHN BROWN

## Subscription details

Building Design is published weekly and sent free of charge to registered architects working in the UK and selected members of allied trades. Subscription rates: one year £30, overseas \$80, single copies 60p. Orders to: Subscription Dept, Morgan-Grampian (Construction Press) Ltd, Royal Sovereign House, 40 Beresford Street, London SE18 6BQ (01-854 2200).

## Principal Architect

£13,878-£15,087 plus Leased Car

This new post will strengthen the Architects' Division in providing architectural advice on major development projects in the Borough which is a growth area for commercial, high-tech and housing development.

We would prefer you to have had five years' post qualification experience but most important is proven design ability and good presentation skills, with the drive and enthusiasm to achieve results.

If you are interested but feel you could not afford to move, read on: We are committed to progressive policies to recruit and retain high calibre staff, and offer the following relocation package.

A substantial Mortgage Subsidy, priority lending facilities with a local Building Society, up to £2,500 towards professional fees on house purchase and payment of removal expenses. Temporary accommodation will also be available.

Other benefits include Merit Pay, Leased Car option (Council subsidy £100 per month), flexible working hours and new town centre offices with excellent staff facilities.

Further details and application forms are available from the Director of Manpower Services, Civic Offices, Gloucester Square, Woking, Surrey GU21 1YL. Tel: (04862) 5831, ext. 3903.

Closing date: 6th December 1986.

woking  
BOROUGH COUNCIL

## BROADWAY & MALYAN

Due to a series of competition successes involving major commercial, retail and residential projects, we are looking to fill a number of vacancies in our four offices.

### WEYBRIDGE

- \* Architects with design flair
- \* Architectural technicians
- \* Senior Architect/Planner
- \* Planning technicians
- \* Landscape architect

### READING

### SOUTHAMPTON

### LONDON OFFICE

14 Mount Row, W1

### Fringe Benefits

Reply with CV to:

- \* Architect with design flair (Part II or III)
- \* Qualified Architect (or Part II)
- \* Architect to take a senior position in our new office

Pension scheme, BUPA, personal health scheme. Attractive salary structure. Assistance towards relocation costs considered.

Richard Manthorpe, BROADWAY AND MALYAN, Osprey House, Station Road, Addlestone, Weybridge KT15 2BN, Tel: 0932 45399.



# APPOINTMENTS

**LEVITT BERNSTEIN ASSOCIATES LTD.**  
Urgently require talented and experienced architects/designers. Applications should be made in writing, enclosing a CV and examples of recent work, to:  
David Lewis,  
30 Oval Road,  
London, NW1 7DE.

**SURREY PRACTICE**  
requires  
**ARCHITECTS**  
an enthusiastic and competent architect with a minimum of 2 years post qualification experience is required to join a small practice with a varied and expanding workload. High standard of design and an interest in historic buildings is essential.  
Apply in writing with CV to:-  
The Whitworth Partnership, 47 Crown Street  
Bury St Edmunds, Suffolk IP33 9DX  
Tel: 0544 44411

## Elsworth Sykes Partnership

Seek applications for the following appointments to work on high quality commercial developments.

### ARCHITECTS

with a minimum of one years post qualification design experience.

### TECHNICIANS

with around 5 years detailed working drawing experience.

Apply in writing to  
Michael Harrison  
Elsworth Sykes Partnership  
Roxburgh House  
273 Regent Street, London W1R 8BX

## Bickerdike Allen Partners BUILDING SURVEYORS

BICKERDIKE ALLEN PARTNERS the architectural practice specialising in architectural design and in building defect investigation and related responsibilities, are looking for experienced and committed building surveyors to share our substantial workload. We work with legal teams and our own teams include architects, engineers, scientists and other specialists. A methodical survey approach in a cost-effective manner together with an ability to produce accurate and concise reports is essential. Applicants must hold a clean driving licence as the work involves travelling throughout the United Kingdom with some overnight stops.

Salary negotiable, subject to experience.

Please send preliminary details and telephone number to:

Mrs J. Dayer  
Bickerdike Allen Partners  
121 Salisbury Road  
London NW6 8RG

## EXPERIENCED ARCHITECTS and TECHNICIANS

We seek experienced staff for our Technical Research Group which forms part of the office's central resource facility, including the library and computer services. We are presently seeking to fill two posts, one for a person having a genuine technical aptitude, to assist in the development of the technical and theoretical projects, the other to have experience in the preparation of specifications and technical reports. Candidates should be enthusiastic, seeking an interesting and rewarding career within the Group. Previous experience in this field would be an advantage.

Write with CV to David Potts at address below

## COVELL MATTHEWS WHEATLEY

ARCHITECTS

19 Bourdon Place, London W1X 9HZ

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## ARCHITECTURAL ASSISTANT

— PART III SUITABLE

required for small Hamstead practice. Conversion work and new projects. Salary to be based on age and capabilities.

Telephone:  
01-435 5801

## EDMUND TORY & ASSOCIATES

require  
**ARCHITECTS & TECHNICIANS**  
with a genuine interest in CAD

We have an expanding workload in both the private and public sectors and offer good salaries and working conditions.

Contact:  
Bob Burn or Alan Whitehead  
Telephone: (044 27) 2671  
or write to:  
Edmund Tory & Assoc.  
254 High Street  
Berkhamsted, Herts HP4 1AQ

## Cazenove Architects Cooperative

requires a Black or Asian

## ARCHITECT/ARCHITECTURAL TECHNICIAN

to complete our 9 strong team working on publicly funded new build and rehab projects in North and East London. The successful applicant will have several years experience of running projects from inception to completion and will be committed to sharing the running of the practice. Salary £14,000 p.a.

Please telephone Susan Pearce 01-249 9899 or write to:  
8 Bradbury Street  
London N16 8JN

Cazenove is an equal opportunity employer. This vacancy is covered by section 38 of the race relations act.

## Frederick, Gibberd, Coombes & Partners

### ARCHITECTS

We are interested in meeting newly qualified Architects and Part II students capable of developing design ideas at concept and production stages to achieve a high standard of Architecture.

The Practice has an expanding programme of substantial commercial and restoration schemes and requires people willing to participate in the involvement of these projects.

If you have experience in these areas and would like to learn more about the Practice please write or telephone in confidence.

Robert Walker,  
Frederick, Gibberd, Coombes & Partners,  
82-84 St. John Street,  
London EC1M 4BP.  
Telephone: 01-250 3051



## EAST HAMPSHIRE DISTRICT COUNCIL

### ARCHITECT to £12,297

An Architect with all round experience is required to lead a small team responsible for the Council's programme of new housing. Opportunities will arise from time to time to be involved with design and refurbishment of other buildings.

### SURVEYING ASSISTANT to £10,164

A Surveying Assistant to join a team responsible for improvement of Council Houses, Maintenance and Modification of existing Sports & Leisure Centres, Offices and Works Depot.

East Hampshire District Council's modern headquarters adjoin open countryside 2 miles out of Petersfield, Hampshire and have excellent sports facilities close by.

Removal expenses and car allowance will be paid for both posts.  
Application forms and Job Description available from the Director of Technical Services, East Hampshire District Council, Penna Place, Durlford Road, Petersfield, Hampshire GU31 4EX.  
Closing date: 1st December, 1988.

## WEYMOUTH, DORSET

Experienced architect to lead a design team of established and design partnership.  
We require a qualified architect, experienced in both design and contract management able to demonstrate technical ability, business acumen and management skills.  
Good remuneration package inc. car.  
December start preferred.

Write with CV to:-  
G. J. Northcote BSc, A.R.I.C.S.  
Adams Rensch & Wright, Survey and Design  
308 St. Thomas Street  
Weymouth, Dorset DT4 8EJ

## CRUICKSHANK & SEWARD

require

### ARCHITECTS

with a minimum of 2 years experience to work on interesting new jobs. A high standard of design and technical ability required.

Please apply in writing with CV to:-  
Cruickshank & Seward  
Royal London House  
196 Deansgate  
Manchester M3 3WP

## YORKSHIRE REGIONAL HEALTH AUTHORITY REGIONAL ARCHITECTS DEPARTMENT

### TECHNICAL ASSISTANT

GRADE III

Salary Scale £5,850-£7,948 per annum Ref No P102  
We require a Technical Assistant III to join a team of Architects and Technicians engaged in an on-going programme of health buildings. Applicants must have a relevant ONC with 4 years experience or an ONC with 2 years experience. Candidates who have alternative qualifications in an appropriate subject will be considered. Experience in health buildings would be an advantage.

Application form and job description may be obtained from and should be returned to the Personnel Services Manager, Yorkshire Regional Health Authority, Park Parade, Harrogate HG1 3AH.  
Closing date Wednesday 19 November 1988.



Please contact David Taylor  
Technical Staff Association Ltd  
Alliance House, 18 Carlton Street, SW1  
Tel: 01-832 3922 (4 lines)

1. LONDON W1 - Busy practice needs an Architectural Technician with 3 years exp. Salary neg depending on ability (ref 313).
2. BURNHAM, Bucks - An Architectural Assistant to join busy design office involved in wide range of residential & commercial projects. Probably only 90% with at least 3 years exp. Salary neg. (ref 9035).
3. LONDON SW1 - Small practice needs Architect about 30, with 5 years experience. Firm does residential & commercial with some restoration work (ref 1595).
4. TUNBRIDGE WELLS, Kent - Vacancy for a recently qualified Architect with 9-12 yrs post qualification experience in multi-disciplined practice. Knowledge of RUCAPS CAD useful but not essential. Salary neg (ref 1300).
5. HIGH WYCOMBE, Bucks - Openings for an Architect and Technicians with at least 2 years exp post HNC for residential refurb + some work on retail commercial projects. Some new build work too. Salary c. £10K (ref 9030).
6. LONDON WC1 - Practice needs recently qualified or part II Architect to assist partner in preparation of design & working drawings for a variety of projects. Salary neg (ref 963).
7. LONDON NW1 - Busy, well known, practice seeks qualified Architect with 9-12 years post grad exp. Temp posts initially. Rates neg (ref 367).
8. LONDON WC1 - practice is looking for lively design & production Architects for commercial & retail projects. Salary neg (ref 134).
9. LONDON W1 - Vacancy for an Architect or Arch Asst for commercial refurb. Ideally someone with part II BBA aged mid 20s. Sal neg (ref 100).
10. RICHMOND, Surrey - Vacancy for a qualified Architect 32 + exp. experienced in full coverage of commercial projects up to c.25M. Good prospects for right person. Salary to £15K-£16K. Good design ability essential (ref 1064).

## ATP GROUP PARTNERSHIP

have an immediate need to meet an expanding new build and rehabilitation workload necessitating the following staff

### ILFORD ESSEX OFFICE SENIOR ARCHITECTURAL TECHNICIAN

Recently qualified

### ARCHITECT or PART II/ TECHNICIAN HNC BUILDING SURVEYOR RICS INTERMEDIATE/HNC LONDON W1 OFFICE

Recently qualified

### ARCHITECT or PART II/ TECHNICIAN HNC

Salary commensurate with age and experience.  
Day release for Professional Courses encouraged.

Contact:  
Margaret Berry - Practice Secretary - 01-514 3030

## DO YOU NEED TO RECRUIT A PROPERTY PROFESSIONAL?

Advertise with confidence for both public and private sector appointments with Estates Times the proven best read property publication amongst property professionals.  
Call David Penny right now for a media pack and full details about how Britain's specialist property newspaper can help you get the pick of the best property professionals.

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READ WHEREVER PROPERTY DECISIONS ARE MADE.

Ring 01-855 7777 Extension 571, or write to:  
Estates Times Appointments, Morgan-Grampian House, 30 Calderwood Street, London SE18 6QH.

## GRAHAM HOBBS ASSOCIATES

Architects and Designers

Buy, interesting young practice urgently require an  
**ARCHITECT + ARCHITECTURAL ASSISTANT**  
with experience in production drawings and contract management.  
We are relocating to wonderful new warehouse studio in EC2 in December.

Apply with CV to:  
Gordana Burfield  
Graham Hobbs Associates  
1 Rosebery Mans  
Rosebery Road  
London SW8 4DQ  
Tel: 01-471 9539

## JOHN GILL ASSOCIATES

Architects Planning Consultants  
145-148 Elham Hill  
London SE9 5EA  
01-850-8727

There are excellent career opportunities in our lively south east London practice for Architects, Technicians and Interior Designers.

Ours is a young and energetic organisation, combining the opportunities of a major commercial office with the travel benefits of a location close to London and easy access to the M25 and other major routes.

Our current need is for

### 2 Architectural Technicians and 2 Interior Designers

with a minimum 2 years experience to work on site for a major, residential development in London.

The people we are looking for will have highly developed skills, agile minds and be able to bear responsibility with initiative. We operate a system of alternating weekends and will be pleased to negotiate salaries.

Apply in writing to  
Carol Van Nierop

## The MacDonald Price Partnership

require

### ARCHITECTS & ARCHITECTURAL TECHNICIANS

for a variety of commercial projects. Car required for travel to work in beautiful Mill in rural Surrey.  
Apply in writing with CV to:-  
Mr Price  
MacDonald Price Partnership  
The Mill House, Mill Lane  
Blythe, Surrey KT14 7RR

## PROPERTY DEPARTMENT ARCHITECT

(PO 1-4) 011-780-215, 894

To work within a multi-discipline group of the division, engaged on new works, adaptations and extensions to the County Council's stock of schools, colleges, libraries, residential homes, magistrates courts, etc.

The successful applicant will be expected to carry out schemes through from inception to completion under the guidance of a Director of Property.

Please Elaine Hays on Chester (0845) 777422 for written details and an application form, or write to The Director of Property, The Towns Department, Chester, West Sussex PO19 8SL.  
Closing date: 28th November 1988.

## ARCHITECT NEWBURY AREA

Architect, preferably with project management experience required to help plan and develop future projects in sub-tropical climate. Reference will be given to applicants with previous experience in this field. Salary to be agreed with full CV to the Company London office.

John Limited  
18 Conduit Street  
London W1

## Eric Lyons Cunningham Partnership

urgently require an Assistant Architect with 5-10 years' experience, for work on an interesting high-tech Exhibition Centre.

Please write with CV to:  
Eric Lyons Cunningham Partnership, Mill Lane  
Studio, Bridge Road, East Molesey, Surrey KT8 9HF.

## ARCHITECTURAL TECHNICIANS

Urgently required by small busy firm of architectural technicians and building consultants. Candidates should have a sound knowledge of building construction and regulations and be capable of working under the minimum of supervision.

Please apply with CV to:  
Mr J. Harman  
Technical Design Partnership  
Blue Coat, 1 Church Lane  
Kings Langley, Herts

# APPOINTMENTS



**YOUNG DYNAMIC PROJECT ARCHITECT**  
required for fast expanding practice. Must be enthusiastic, energetic, self-motivated, but some hotel, restaurant, club, people's homes etc. You must be capable of working on a multitude of projects simultaneously and taking them from inception to completion. Minimum 3 years experience.  
Please send CV stating salary required to:  
S. Paul  
49 Bodley Road, New Malden, Surrey KT3 6DD

## ROEVIN

Architects & Architectural Technicians  
for staff and contract positions in London the Home Counties, Midlands the North West and York shire  
Phone the office on 021 558 3678 or CV to:  
10

Roevin Limited  
10 Bodley Lane  
Sole, Manchester M3 3 1BY  
(AGENCY)

## CAMBRIDGE ARCHITECTS

Require experienced Architectural Assistant/Technician to prepare working drawings with minimum supervision for a variety of jobs.

Please write with CV to:-  
Hughes + Bicknell  
Turnwells Court  
Trumpington Street  
Cambridge CB2 1RE

## LINCOLN ARCHITECTURAL TECHNICIAN

required by busy Lincoln office. Age 25/30 with plus to residential work. Expanding workload, pleasant working conditions - salary negotiable.

Write with full CV to:-  
Stephen Roberts Associates  
71 Carholme Road,  
Lincoln LN1 1RT

## ARCHITECTS

Applications are invited from Architects who would like to play a major role in the development and expansion of a City practice, where a varied programme of commercial and industrial projects are undertaken. Salaries are excellent, to match the importance of these positions. Urgent, temps needed to assist our numerous clients.

Mark Brauer  
Newbridge  
01-493 4441 (AGY)

## HENLEY-ON-THAMES

Qualified Architect required to join our happy team giving a personal service on a wide variety of projects. Established 17 years on the outskirts of this lovely town. Please apply in writing to:  
David Type ARBA  
Chartered Architects  
Bespoke House  
Henley-on-Thames  
Oxon RG9 1TN  
Tel: (0491) 87634

## Junior Architectural Technician required

with 3/4 years experience. Able to work on own initiative. Varied and interesting architectural and interior design work.  
Apply in writing giving details of previous experience to:  
Planning & Building Associates  
and Rose, 71 The Rock, Bury

## MALLA ARCHITECTURAL HOT LINE 01-387 1043 334 Euston Road, London NW1 3BG

## Architect : Assistant

required for high quality residential projects.  
Please write with CV to:  
WILLIAM GREY  
BOND PROPERTIES LTD  
39/41 BROMPTON ROAD  
LONDON SW3 1DE

## ARCHITECTURAL TECHNICIANS

For Mold and Writal offices  
HNC level with experience.  
Reply with CV to:  
Paterson Alcazar and Owens  
Royal Oak  
29 Village Road  
High Wycombe  
Writal W13 8Y

## ARCHITECT/SURVEYOR

Required by private architects to administer and supervise the refurbishment and improvement of an estate of flats in a London borough. The post is offered for the fixed term of the building contract of about 18 months. Salary negotiable.

Please telephone  
01 440 7944

## ARCHITECTURAL TECHNICIAN

required for busy office with varied workload. Must have at least 3 years experience.

Apply in writing or phone:-  
Hartford Planning Service  
98-100 Fore Street  
Hartford, Herts SG14 1AS  
Tel: 0999 352173

## Junior Architectural Technician required

with 3/4 years experience. Able to work on own initiative. Varied and interesting architectural and interior design work.  
Apply in writing giving details of previous experience to:  
Planning & Building Associates  
and Rose, 71 The Rock, Bury

## Haverstock Associates ARCHITECT/WRITER RESEARCHER

Recently or newly qualified architect to work on new buildings, research and technical information. Must be able to write and draw well as well as good understanding of building construction - salary approx. £12,000.  
Please write with CV to:-  
10 Cliff Road Studios  
London NW1 5AN

## FOR SALE

## ANDREW GRIMA

Offers are invited for the Gunga Shungtum to be designed by Bryan Knoll - also for the front door, automatic and other designed by Geoffrey Clarke.  
Tel:  
Miss Curtis on  
01 262 7700

## COURSE

## WEEKEND COURSES

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PASSIVE SOLAR BUILDINGS  
SOLAR COLLECTOR DESIGN  
WINDPOWER  
For details write to Lesley Bradnam  
CAT, Machynlleth, Powys  
Tel 0454 5405

